Tales of Testosterone
A Historical Study of the Science of the Male Hormone in Male Menopause and Homosexuality

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Abstract

Berättelsen om testosteronet. En historisk studie av vetenskapen om det manliga könshormonet inom det manliga klimakteriet och homosexualitet.


I denna uppsats behandlas också förhållandet mellan de manliga könshormonen och homosexualitet. Jag undersöker varför läkare försökte använda testosteron och andra manliga hormon som "botemedel” av homosexuella män och jag beskriver ett experiment som gjordes på homosexuella av den svenska doktorn Erik Lundberg.
Abstract

The purpose of this essay is to investigate the history and ideas of the male menopause and testosterone and how they are linked to ideas about sexuality, morality and how the doctors viewed the male menopause. The aim is also to understand how ideas about the male menopause has changed from the 1920’s compared to today and how it has been discussed by scientists. The importance of testosterone and the role the ideas of testosterone have played is also of importance for the purpose of this essay. In the essay, I use the sociologist Peter Conrad's theory of medicalization. Conrad describes medicalization by saying that it is a process where non-medical problems change and become defined and treated as medical problems, and this is usually done in the form of disease and disorders.

In this essay, I describe how the ideas of a male menopause evolved in the period 1920’s - 1960’s. I describe the ideas scientists and doctors had about what a male menopause could be. This essay also examines the impact the discovery of testosterone had on ideas about the male menopause. The debate that doctors have had if there is a male menopause or not is also discussed in the essay.

In this essay, I present four Swedish doctors and a Finnish doctor from the period 1920’s - 1960’s and their ideas about the male menopause and testosterone. When the discussion turns to testosterone, I present Paul de Kruif who published the book *The Male Hormone* (1945) and was one of the first to promote testosterone treatment. I also describe the medicalization of male menopause and testosterone and why the male menopause and testosterone did not have the same impact as the female menopause.

This essay also discusses the relationship between the male hormone and homosexuality. I examine why doctors tried to use testosterone and other male hormones as a "cure" of gay men and I describe an experiment conducted on homosexuals by the Swedish doctor Erik Lundberg.
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Introduction

How do the ideas about the male menopause, testosterone, hormones and aging, connect to each other? That is the fundamental question that I want to explore in this essay and also how the ideas about how testosterone and other hormones came to be viewed as a possible “cure” for male homosexuality.

How do men cope with getting older, going through the changes of life and living up to the ideal of how a man should be? I want to explore all these things and many more aspects of what it means for a man to go through the male menopause and all that follows with it. My interest in hormones and the male menopause emerged when I was writing my previous essay about endocrinology and the advertising of hormones. In my research I came across the male menopause and the meaning hormones have on people’s lives and it made me want to explore the subject further. Aging is a fascinating subject that is much more complex than most people might think. What I also came across in my research is that the male hormone was sometimes used as a possible “cure” for homosexuality and that made me want to explore further as to why doctors thought so.

During a long time I have also been interested in medical history which is why the theory of medicalization is a suitable theory for me to use in this essay.

Purpose and questions

The purpose of this essay is to study and analyze how the history and the ideas of male menopause and testosterone are linked with the ideas about sexuality, morals and how the doctors view the male menopause and testosterone. It’s important to understand how the ideas about the male menopause and testosterone have changed from the 1920’s compared to present day.

The questions in this essay are;
- According to medical researchers how have they explained the male menopause?
- How do the ideas about the male menopause, testosterone, hormones and aging connect to each other and have they changed during time? How are they expressed in the sources that I use?
- Why did doctors have the idea that homosexuals could be cured with testosterone and other hormones?

The limitations that I have in my essay is that I have studied the debate on male menopause and testosterone in Sweden and in the USA during the period 1920’s – 1960’s. I chose this
period because it is just before testosterone first was synthesized in 1935 and then I can take part in the discussion about organotherapy and other hormonal treatments that existed before testosterone. After 1935 the discussion on the male menopause and testosterone treatment was a big part of the medical sphere before it faded away in the late 1960’s. Besides this period I also focus on the part male menopause and testosterone have in modern time to get a better perspective on how ideas and the use of testosterone and other hormonal treatments are used today but also how it has changed from the 1920’s. Since I only found male medical researchers I have limited myself to only use them in this study and to only use published material because it’s the only form of material that I have found.

**Method and main sources**

The method that I use in this essay is analyzing text from my main sources and through the text analysis it helps me understand the different ideas and thoughts physicians had on the male menopause, testosterone and homosexuality. With the text analysis I can put the physician’s ideas into a broader perspective and compare them to modern ideas about the subject. My study is also a contextualizing of previous research, where I compare ideas from the 1920’s – 1960’s with ideas from today. I use the American microbiologist Paul de Kruif in my study because in that way I can compare the ideas about male menopause and testosterone that existed in Sweden with the ideas that were in the USA.

The main sources in this essay are four articles, one book chapter and one book from five different Swedish doctors and one Finnish doctor. I have chosen these particular texts from the different doctors because they all represent different points in time, one is for example from the 1920’s, another from the 1930’s, one from the 1950’s and from the 1960’s. They also discuss and present ideas about the male menopause and testosterone that are relevant to my study and I also felt that they in a proper way could show how ideas about the male menopause and testosterone was perceived during this time. Another main source is Paul de Kruif, an American microbiologist and author which I chose because he was one of the first to promote the new testosterone treatment that emerged after 1935.

The Swedish doctors that I use are Einar Rodhe and his article “Climacterium Virile” (1927)\(^1\). This article contains a discussion about how the male climacterium has developed and what symptoms and treatments there are for this disorder. Rodhe discusses how older men with this disorder act and how it differs from the female menopause. I chose his article

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\(^1\) Einar Rodhe, "Climacterium virile", in *Svenska Läkartidningen. Organ för Sveriges läkarförbund Vol. 24, Nr. 1* (1927).
because it was one of the earliest Swedish works on this subject that I found and it fits with the time period that I have limited myself to. Rodhe was born in Lund 1875 and died in 1946. He was a Swedish doctor that took his bachelor’s degree in medicine 1895. He got his medical license in 1902 and PhD degree in 1905 at the Karolinska Institute in Stockholm. He was also an amanuensis at the Seraphim hospital in Stockholm and he practiced medicine mostly in Gothenburg and as a railroad doctor at the State railway. He was active within the field of pathological diseases, nerve diseases and outpatient care.

Alfred Josefson and his book *Vad betyda insöndringsorganen för vår kropp och själ* (1925). In this book Josefson discusses the importance of the endocrine glands and how they affect aging and people’s sexual orientation. His book is important in my study because he discusses not only how hormones effect aging and sexuality but he also shows different medical cases where organotherapy have been used on patients who wants to be rejuvenated and on homosexual men. Josefson was born 1870 and died 1946. He was a doctor at the Karolinska Institute and he spend a lot of time studying the deviations in growth and sexual function.

Folke Henschen and his article “Älderdomen och dess medicinska problem” (1950). This article is about how aging brings forth a lot of different medical problems and he discusses which they are and possible treatments for them. His article is important because it contains ideas on how doctor’s viewed aging in the 1950’s. Henschen was born in Uppsala 1881 and died 1977, he was a doctor and professor in pathological anatomy. He was a professor from 1920-1946 at the Karolinska Institute and he was the one who initiated that there should be more research around aging and its diseases.

Axel Westman and his book chapter “Testes” (1963) from the book *Endocrinology*. This book chapter discusses the importance of the male testes and how lack of production in the testes can cause symptoms of a male menopause and he also gives insight on the difficulties in diagnosing the male menopause. His book chapter is important because it helps to see if ideas have changed from the 1920’s. Westman was born in Stockholm 1894 and died in 1960. He was a doctor and professor in obstetrics and gynecology. He got his medical license in 1922 and his PhD in 1926 and he was also active at the Karolinska Institute. Westman's

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3 Alfred Josefson, *Vad betyda insöndringsorganen för vår kropp och själ* (Stockholm, 1925).
scientific activities covered most areas of obstetrics and gynecology, but he was particularly interested in endocrinology.\(^7\)

The Finnish doctor is Paavo Vara and his article is called “Klimakteriet och dess behandlingar” (1960)\(^8\). His article is about what the male menopause is and how it can be diagnosed and his article is important to the study because it shows how doctors thought they could diagnose the male menopause. Vara was born in 1908 and died in 1989. He was a Finnish physician and professor and he was active in the field of obstetrics at the University of Helsinki.

Erik Lundberg and his article “Follikulinbelastning av homosexuella män”\(^9\). His article is about hormonal experiments made on homosexual men. He conducted experiments and he explains how he conducted them on homosexuals and he also discusses why it was important to do these hormonal experiments on men that were homosexuals. This article is very important to my study since Lundberg explains why and how he experimented on homosexuals.

My last main source is Paul de Kruif and his book *The Male Hormone* (1945)\(^10\). His book is about aging, rejuvenation and the treatment of testosterone. He discusses the positive effects of using testosterone treatment and he also brings up a few medical cases to strengthen his argument that testosterone really works. This book is also very important to my study since he shows how the discussion on aging and testosterone was in the USA. De Kruif was born in 1890 in Michigan, USA and died in 1971. He was a microbiologist and author. He was active at the University of Michigan and worked for a time at the Rockefeller Institute before he became a fulltime author.

**Previous research**

The previous research on hormones, male menopause and testosterone also comprises my secondary material in this essay. Some research that have been done on the subjects are *Beyond the Natural Body. An archeology of sex hormones* (1994) by professor in science- and technology studies Nelly Oudshoorn.\(^11\) This book contains explanations to the birth of endocrinology and its development but also how "male" and "female" hormones were

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\(^7\) [http://www.ne.se.proxy.ub.umu.se/uppslagsverk/encyklopedi/lång/axel-westman](http://www.ne.se.proxy.ub.umu.se/uppslagsverk/encyklopedi/lång/axel-westman), 2016-05-16.


\(^9\) Erik Lundberg, “Follikulinbelastning av homosexuella män”, in *Hygiea: Medicinsk tidskrift Vol. 96, Nr. 16* (1934).


established and marketed. Oudshoorn shows researcher’s intense search for the ovaries, testes and urine to create hormones that could alter the hormonal body. She explores how knowledge of sex hormones have shaped people’s understanding of gender and body.

John Hoberman, a European cultural and intellectual historian, and his book Testosterone Dreams: Rejuvenation, Aphrodisia, Doping (2005).12 This book addresses how testosterone for decades has inspired dreams on a restored youth, higher libido, bigger muscles, being a manly man since it was first synthesized in 1935. The book is a historical overview of the use of testosterone and what effect hormone treatments have had on people lifestyles and society.

The Pursuit of Perfection. The promise and perils of medical enhancement (2003) by Sheila M. Rothman, professor in public health and David J. Rothman, professor in social medicine.13 This book deals with the marketing of the female and male sex hormones and various pharmaceutical companies. It also takes up people's desire to constantly want to be perfect, so perfect that they start trying to change how the body works. They also investigate the impact hunting for biological perfection has on individuals and on society.

Sheldon J. Segal & Luigi Mastroianni, both endocrinologists and their book Hormone Use in Menopause & Male Andropause: A Choice for Women and Men (2003).14 This book helps readers to understand and get answers to some of the most common questions about menopause and andropause but also answers to why men and women should try hormone therapy after they enter menopause. It offers explanations to what the menopause is and they present information about benefits, risks and prospects for using hormone therapy.

Sociologist Raewyn Connell and her book Masculinities (1995).15 In her book she discusses how masculinity studies have developed during history and she also look at global gender relations. She studies theories and practical uses of masculinity research. In the book she also studies theories and practical uses of masculinity research.16

There are several articles published on these subjects that I also use in my study.


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12 John Hoberman, Testosterone Dreams: Rejuvenation, Aphrodisia, Doping (California, 2005).
Historian Elizabeth Siegel Watkins have written the article “Medicine, Masculinity, and the Disappearance of Male Menopause in the 1950s” in *Social History of Medicine* (2008). Merle Wessel, PhD in politics, has written the article ”Castration of male sex offenders in the Nordic welfare state in the context of homosexuality and heteronormativity, 1930-1955”, in *Scandinavian Journal of History* (2015). These articles are important because they discuss testosterone in a historical perspective, how the discussion of a male menopause faded away in the late 1950’s and 1960’s and how homosexuality has been viewed in the Nordic countries during the 1930’s and forward.

With my study I have contributed to the field by putting these Swedish doctors and their ideas in an international perspective. As far as I have found in my research no one has translated these Swedish doctor’s texts or even used them in previous research and in that way I have contributed in bringing forth ideas that might would have been forgotten otherwise. I have contributed by taking the Swedish texts and putting them in broader perspective and comparing them with ideas that existed in the USA and with Paul de Kruif.

**Theory**

In this essay I am using sociologist Peter Conrad’s theory of medicalization and the main source is his book *The Medicalization of Society. On the Transformation of Human Conditions into Treatable Disorders* (2007). Conrad describes medicalization by saying that it’s a process in which nonmedical problems change and become defined and treated as medical problems and this is usually done in terms of illness and disorders. He has also noticed that during the last decades there has been an increase of ailments and disorders which has been diagnosed and subsequently become medicalized. Disorders like alcoholism, obesity, anorexia, impotence, menopause, Alzheimer’s, ADHD, depression, PMS and sleeping disorders have been diagnosed and medicalized. With the increased diagnosis of all the different ailments mentioned above, it have meant that it has brought more individuals, life stories and problems into the medical sphere. Conrad says the most important thing with medicalization is how something becomes defined medically and the consequences it brings.

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18 Elizabeth Siegel Watkins, "Medicine, Masculinity, and the Disappearance of Male Menopause in the 1950s", in *Social History of Medicine Vol. 21, Nr. 2* (2008).
21 Ibid., 4.
Disorders can be medicalized but they can also be demedicalized, such as homosexuality and masturbation.\textsuperscript{23}

The main point in considering medicalization is that an entity that is regarded as an illness or disease is not ipso facto concepts a medical problem; rather, it needs to become defined as one. While the medical profession often has first call on most maladies that can be related to the body and to a large degree the psyche […], some active agents are necessary for most problems to become medicalized […].\textsuperscript{24}

What Conrad wants to show is how certain disorders that were once viewed as normal become medicalized through various factors mainly that the ailment or the disorder needs to be defined as a problem by people in the medical profession. However on the other side of this is that behavior that once were defined as immoral, sinful or criminal have gotten a medical meaning with its medicalization, it has moved from being bad behavior to being a sickness. Behaviors that were once viewed as immoral or sinful has been, mental disorders, sexual and gender difference, sexual dysfunction, learning disabilities and eating disorders. There are also some common life processes that have been medicalized, such as anxiety and mood, menstruation, birth control, infertility, childbirth, menopause, aging and death.\textsuperscript{25}

With medicalization it doesn’t have to be total, there can be different degrees of medicalization. Some disorders can be almost fully medicalized such as childbirth or severe mental illness, while others can be partly medicalized such as menopause. There can also be disorders that are minimally medicalized such as sexual addiction.\textsuperscript{26}

While we don’t know specifically which factors affect the degrees of medicalization, it is likely that support of the medical profession, discovery of new etiologies, availability and profitability of treatments, coverage by medical insurance, and the presence of individuals or groups who promote or challenge medical definitions may all be significant in particular cases.\textsuperscript{27}

There are certain engines of medicalization that exist in order for it to work. One of these are the consumers and they are a factor of medicalization mainly because health has become a product. In modern times people are becoming more and more interested in diagnosing themselves. Consumers are more frequently trying to analyze their own health and this happens often when consumers have been influenced from watching TV or when they are trying to diagnose themselves by searching the internet.\textsuperscript{28} Advertisements also encourage the consumers that they need to consider their health and look for disorders that they normally

\textsuperscript{23} Conrad (2011), 13.
\textsuperscript{24} Conrad (2007), 5f.
\textsuperscript{25} Ibid., 6.
\textsuperscript{26} Ibid., 6.
\textsuperscript{27} Ibid., 7.
wouldn’t have thought about. “New social representations of health and illness are emerging, for instance, the representations of idealized beauty and the parallel ‘treatments’ of cosmetic surgery. The body is increasingly considered as a ‘text’ through which people may transmit signals and information.” Technology is also an important engine of medicalization since diagnostic tools equals more opportunities to discover illnesses. It is thanks to many new technologies that diseases can be detected and subsequently become medicalized. Sociologist Antonio Maturo also writes that managed care is an engine of medicalization where social problems like depression can be transformed into medical ones. Depression can, for instance go from being a social problem where psychotherapy is the treatment to being a medical problem when the treatment are based on pills.

In Peter Conrad’s *Medicalization of Society* (2007) he studies three different cases of medicalization; the medicalization of the male menopause, baldness and erectile dysfunction.

**Disposition**

Chapter one is about the male menopause and its history, when the concept occurred and how people perceived it. The chapter explores how it throughout the ages has been some kind of desire to be younger and stronger, such as the experiments that Charles Edouard Brown Séquard did. It also explores how the ideas about rejuvenation have transformed to be perceived as a male menopause. In this context, the chapter also contains history about testosterone, what it is and how people thought it would change the man's aging and similar disorders.

In chapter two I will discuss in more detail and analyze the male menopause and what the effect of testosterone may have had on ideas about the male menopause. This chapter will also discuss how the debate about the male menopause has been since people first started using it until today. In this chapter I present four different Swedish doctors and one Finnish doctor from the period 1920’s – 1960’s and their views on the male menopause. I show what their ideas on the male menopause were and how they thought it was best treated. What do the doctors really say about this concept and what do the doctors that are behind a male menopause versus those who are against the concept say.

In chapter three the discussion turns to testosterone and what this phenomenon is all about. In this chapter I explore one of the first men who promoted testosterone in the 1940’s –

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29 Maturo (2012).
30 Ibid.
31 Ibid.
Paul de Kruif. The chapter also contains the discussion doctors had when testosterone first came, if it was a miracle drug or not. I also describe the medicalization of the male menopause and testosterone and also discuss the connection between testosterone and male menopause.

Chapter four will explore the relationship between testosterone and homosexuality. How the male hormone has been used to try to "cure" men of their homosexuality. Why did doctors think that testosterone could change how a person was and acted? In this chapter I also discuss one Swedish doctor Erik Lundberg and his experiment on homosexuals. I also discuss the medicalization and demedicalization of homosexuality.

Chapter five is the concluding analysis where I discuss why the male menopause and testosterone didn’t have the same breakthrough as the female menopause and estrogen had on the market. I will also discuss how the Swedish doctors and Paul de Kruif thought about testosterone, if anyone had any warnings about it. I also discuss some of the risks and problems that testosterone and other androgen supplements have.

The last part is the summary of the essay.
Chapter 1. Male menopause and testosterone – a brief history

The search for youth

Long before anyone had ever mentioned a male menopause there were men who sought the answer to a long life and how they, in their old age, could get their youth back once again. For centuries in both folklore and medicine people tried to find what the sources of maleness was, people sought ways to promote strength, vitality, and potency. “Ancient physicians administered potions of ground-up animal testes to men, in the belief that the testes, as the anatomical seat of masculinity, contained substances that promoted or restored vigor.” Over the centuries there have been variations of this practice, where people have made similar brews and nostrums in their search and demand for products that they hoped would be efficient in restoring men’s vigor. The underlying idea in trying to produce products with ground-up animal testes was that people thought the visible product of the testes such as sperm and seminal fluid was what represented the male principle. In history it has been commonly believed that the production of sperm was a necessity in the development of male secondary sexual characteristics, like muscle mass and genital growth.

“Discovering the secrets of the male body [...] occupied a prominent place on the research agenda for the new disciplines of physiology and endocrinology”. One of the men who first utilized the idea that each and every organ produced a special substance that transports trough the blood and effects the entire body was Théophile de Bordeu (1722-1776) in 1775. He even stated that disturbance in these substances play a very important role in the onset of pathological conditions.

The physiologist Arnold Adolph Berthold (1803-1861) who in 1849 postulated internal secretion from his testicular transplantation experiments is considered by some as the father of endocrinology. With his experiments it was concluded that the testicles produced a specific substance that had the ability to sustain the male sex characteristics in men.

Some say that the quest for male rejuvenation and the birth of endocrinology instead began

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33 Ibid., 132.
34 Ibid., 132.
35 Westman (1963), 1.
36 Ibid., 1.
when the French scientist Charles Edouard Brown-Séquard (1819-1894) in 1889 presented his results from an experiment he had conducted on himself. The seventy year old man felt that his vitality was disappearing and he figured that the fatigue which old age brought on was connected to the testicles functioning less then before. He thought that he could reverse this problem by injecting himself with juice from animal testicles. He presented this to his colleagues in Paris, that he had been rejuvenated thanks to the injections of animal testicles. He said that he felt that his life force was returning back to him once again and that problems connected to old age was disappearing. Even though Brown-Sequard wasn’t the only one or even the first one to think of what is now referred to as organotherapy, he is one of the more famous scientists who had the intentions of figuring out the meaning of age and how to stay young. Brown-Séquard popularized this method of organotherapy with his self-experiments. His experiments evoked a great interest and awareness about the inner secretions in the body and inspired many others to start researching endocrinology.

Eugen Steinach (1861-1944) of Vienna was another prominent figure in the development of rejuvenation and he introduced the operation of ligature of the vas deferens for rejuvenation. For over twenty years Steinach had been working on this and similar physiological problems. His experiment contained the castration of male guinea-pigs and then grafted ovaries into them and he reported that the animals developed some female characteristics. Steinach later succeeded in grafting both testicles and ovaries on the same animals after castration, with the result that they developed both male and female characteristics.

In the 1920’s there was another man who tried to do something similar as Brown-Séquard and Steinach and that man was Sergio Voronoff (1866-1951). He conducted experiments where he transplanted testes from animals, mostly monkeys, to men in hope that these new testicles would rejuvenate older men. These experiments and their effectiveness turned out to be humbug and was disproved. It was after Voronoff’s failures that organotherapy began to lose its footing within the scientific sphere. Scientists began to realize that the old ways of trying to study men and their aging process wasn’t working with organotherapy which is why it all changed when Ernst Laquer (1880-1947) in 1935 successfully isolated the hormone

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37 Axel Westman, *Hormoner* (Stockholm, 1940), 17.
38 Eberhard & Susan Nieschlag (2014), 161.
39 Vas deferens is part of the male reproductive system of many vertebrates; these vasa transport sperm from the epididymis to the ejaculatory ducts in anticipation of ejaculation.
41 Eberhard & Susan Nieschlag (2014), 161.
testosterone from bull testes in Amsterdam.\textsuperscript{42}

According to Eberhard and Susan Nieschlag modern androgen therapy started in 1935 with Ernst Laquer and in that same year testosterone was chemically synthesized independently by Adolf Butenandt (1903-1995) in Göttingen and Leopold Ruzicka (1887-1976) in Basel. With the synthesized testosterone physicians began to develop big plans for the use of it and since many thought that; “testosterone promised to preserve and restore manhood, reinvigorate physical and intellectual capacities, ward off old age, and reverse senescence”.\textsuperscript{43} Physicians believed they could cure a number of things.\textsuperscript{44} David and Sheila Rothman means: “as with estrogen, physicians dispensed the hormone without distinguishing between cure and enhancement or concerning themselves with its potential risks.”\textsuperscript{45}

In the midst of all this going on there were some discussions during the nineteenth century in England concerning the male menopause or andropause as it is called by some scholars and by some doctors today. During the nineteenth century the male menopause was described by the doctors as a degenerative disease of old age, where it suddenly occurs an exhaustion of the life force in men. Even though talks about a male menopause happened before talks about a female menopause, it is the latter that have become synonymous with the word menopause. The concept of menopause came to denote female disorders and menopause became synonymous with women and not men. Since men do not lose their reproductive capacity when they grow older, the idea of a male menopause was left unexplored for a time.\textsuperscript{46} It was not profitable to spend time and money on marketing hormone preparations for the male menopause since many men didn’t want to admit that they had any problems. It was also difficult to know exactly which symptoms the male menopause contained and that made the concept of a male menopause less attractive to explore.

As the quote above shows, menopause as a concept was coined early on but it quickly became a concept that was synonymous with female problems. According to Elizabeth Siegel Watkins

\textsuperscript{42} Eberhard & Susan Nieschlag (2014), 161.
\textsuperscript{43} Sheila & David Rothman (2003), 131.
\textsuperscript{44} Ibid., 131.
\textsuperscript{45} Ibid., 131.
\textsuperscript{46} Adam Droppe, Konstitueringen av ett vetenskapligt objekt. Exemplet – det manliga klimakteriet (Umeå, 2010), 2.
\textsuperscript{47} Ibid., 2.
and Nelly Oudshoorn there are several reasons as to why the male menopause is not as explored as the female menopause. One reason is because it has not had as great medical importance because men do not lose their reproductive capacity when they enter menopause as women do. They argue that unlike the female menopause, it was not profitable to spend time and money on marketing hormone preparations for the male menopause because many men did not want to admit that they had any problems but also because it was difficult to know exactly what symptoms men had when they entered menopause. Many of the symptoms associated with male menopause, such as impaired libido and impotence, might as well be the consequences of depression, so it was difficult to know who really could be diagnosed with the male menopause and who could not. Oudshoorn also says that it was taboo for men to seek help for sexual problems. Older men with impotence almost never sought help for their problems which led the pharmaceutical company Organon in the Netherlands to not advertise drugs for the male menopause.⁴⁸ Oudshoorn explains further that:

> In contrast to the female menopause, the medical attention given to the male menopause, which was characteristic of the last decade of the nineteenth century, gradually diminished during the early decades of the twentieth century. Here we see how the pre-idea that virility is controlled by the male gonads gradually disappears from the forefront in sex endocrinology.⁴⁹

Another reason why the male menopause and testosterone wasn’t successful is given by John Hoberman who says that “the most important factor was the sexual conservatism of most physicians and the society they served. The belief that testosterone was a sexually stimulation drug made it a potential threat to sexual morality as well as a promising therapy”.⁵⁰ It was not until the second half of the twentieth century with the sexual freedom which was made possible by the birth control pill, that the old restraints that had prevented sexual expression was undone and testosterone and the male menopause could once again enter the medical scene.⁵¹

Even though male menopause might not have been the same economical success as the female menopause, it didn’t mean that the discussion of the male menopause went away. Male menopause has been discussed in both medical and popular literature since the 1930’s. Although doctors and scholars called it the male “climacteric” the doctors didn’t fully acknowledge that there was a male climacteric but they suggested that men might undergo

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⁴⁸ Oudshoorn (1994), 103.
⁴⁹ Ibid., 103.
⁵⁰ Hoberman (2005), 8.
⁵¹ Ibid., 9.
some sort of physiological change at mid-life. The doctors also weren’t sure if the newly synthesized testosterone could help smooth this transition in men’s life and this is because in the 1930’s, testosterone preparations were brand new and the doctors did not know what effects or side effects it had. While some didn’t believe in the helping effects of testosterone there were other doctors who did believe it had a positive effect on men and that testosterone were some sort of miracle drug.

Elizabeth Siegel Watkins also believes that although some advocated testosterone treatment, the hormone therapy never really did become popular among older men because it didn’t cure the main side effect of menopause, which was impotence. Either way there were many who thought of testosterone as a quick fix to become a more manly man. Hormone treatments in men were considered able to revive the man’s lust, but also able to make him the man he really wanted and should be according to existing social norms. Siegel Watkins writes that there was a trend to diagnose symptoms such as fatigue and other psychological and physical symptoms as climacteric and endocrine in origin because of the new availability of synthetic testosterone which had been brought to the market after scientists isolated it in 1935. Physicians happily treated their patients that suffered from a variety of male complaints with testosterone injections in the 1940’s. Physicians quickly realized that they had more luck with prescribing testosterone for their patients who suffered from fatigue, concentrating problems, loss of memory, restlessness, insomnia and irritability than to inject testosterone for impotence. Testosterone became a charismatic drug because it promised sexual stimulation and renewed energy for individuals and greater productivity for modern society. In the 1940’s the drug was being hailed “as a mood-altering drug whose primary purpose was the sexual restoration and reenergizing of aging males”. John Hoberman writes that the idea that; “testosterone could be a performance-enhancing drug that could boost the productivity of socially significant people appeared in 1939, along with the idea of the male menopause”. Some physicians hoped that testosterone replacement therapy would help older men with important positions to fulfill their social and economical responsibilities.

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53 Ibid., 370.
54 Ibid., 370.
55 Siegel Watkins (2008), 332.
56 Ibid., 333.
57 Hoberman (2005), 3.
58 Ibid., 4.
59 Ibid., 4.
Siegel Watkins means that in medicine, there were discussions about a male menopause from the late 1930’s to mid-1950’s. After that period virtually all discussions on the concept disappeared in the medical community to emerge four decades later in the 1990’s.60 There were medical students who defended the theory of a male menopause after the 1950’s, but they did not get much attention, and the concept and the theory was largely forgotten. One explanation for this, according to Siegel Watkins, was that some physicians thought that the male menopause no longer had a place in the medical sphere. As testosterone did not live up to the hopes, the interest in the male menopause cooled down.61 Another explanation is that the men in the 1950’s did not like the idea that men could suffer from something similar to female problems. Instead the diagnosis of a stress-induced condition fitted better with the idea of the hardworking man who was the breadwinner. The ideas on how a man should be just didn’t fit in with the idea of a male menopause and instead focus moved from hormones to psychology and that which previously were perceived as a hormonal trouble now began to be treated with sedatives.62 “With middle-aged men’s malaise now recast as the manifestation of a stressful modern life, the fusty diagnosis of male climacteric became a thing of the past.”63

After having been away from the medical sphere for 40 years, the male menopause, in the 1990’s under the name of andropause had a rebirth. The male menopause rebirth took place around the same time as impotence was renamed erectile dysfunction and with the launch of Viagra, impotence could be treated. One reason that testosterone wasn’t popular in the 1950’s was its poor power to treat impotence. Now that impotence could be treated, testosterone was reintroduced as a potential treatment for the remaining symptoms associated with the male menopause.

60 Siegel Watkins (2007), 377f.
61 Ibid., 377f.
62 Siegel Watkins (2008), 331f.
63 Ibid., 341.
Chapter 2. How did the doctors explain male menopause – the Swedish case 1920-1960

The male menopause is said to be a syndrome typically characterized by fatigue, erectile dysfunction, decreased muscle strength and depression, which often occurs in the fifties due to declining levels of sex hormones in men. The cure has also been said to be supplements of the mainly male hormone testosterone.\(^{64}\) However the early diagnoses of the male menopause were very vague and physicians were unsure how to define this syndrome, some said that it seemed reasonable to believe that men could also suffer from menopause. John Hoberman writes of one proponent of the male menopause who wrote in 1939; “That many if not all men pass through a climacteric period somewhat similar to that of women, usually in a less severe but perhaps more prolonged form.”\(^{65}\) Hoberman writes of two other physicians who wrote in 1942; “The male climacteric presents one of the complex problems of aging. Its etiology is confused and undermined. Its symptomatology is involved, tremendously varied, and rarely brought to the attention of the physician in all its diversity.”\(^{66}\)

The Swedish doctor Einar Rodhe (1875-1946) writes in 1927 about the male menopause or “climacterium virile” as some older scholars called it. He writes that in men there occurs a similar physiological process that women go through when they enter menopause. When men enter their fifties there are certain disorders that follow according to Rodhe and he also says that many of the cases where men suffer from menopause have been wrongly diagnosed as something else since the symptoms aren’t always easy to spot or understand.\(^{67}\)

Rodhe names one person which he considers to be the one who brought the male menopause to light and that is the German neurologist Kurt Mendel (1874-1946). He wrote a dissertation in 1910 which drew attention to the existence of a male menopause and he clarified its pathogenesis and symptomatology. Mendel’s ideas about the symptoms that were connected to the male menopause were mainly that he considered it to be caused by disorders in the nervous system. Mendel’s contributions to the field according to Rodhe is that he was the first who thoroughly discussed the subject and he also showed the differences between


\(^{65}\) Hoberman (2005), 141.

\(^{66}\) Ibid., 141.

\(^{67}\) Rodhe (1927), 4.
male menopause and other age related diseases. A piece of evidence that male menopause exist according to Rodhe is that men enter a period later in life, when their libido deteriorates, and if they have children after their libido has started to deteriorate their children isn’t going to be as strong as the ones he had when he was younger. Rodhe thought that this was proof that men enter menopause, it sounds outrageous now but at the time it made sense for him.

According to Rodhe the male menopause occurs because of disorders in the nervous system and from the genitourinary sphere. He also points out that men suffering from menopause also suffer from a weaker mind since the symptoms of the menopause are very exhausting and the mind starts to deteriorate, men will start to complain about mental fatigue according to Rodhe. To him it was really obvious and clear that men could also suffer from menopause and he even made it sound like men who suffered from menopause suffered more than women did when they entered menopause. According to him when women enter menopause there are only a small amount of gametes destroyed, the egg cells don’t mature but shrivel. In men there are a lot of gametes which are destroyed and while the woman is used to the symptoms of the menopause since women experience similar problems during pregnancy the changes in the man is something completely new. The destruction of gametes in men is a new process and this process can be very invasive on the man according to Rodhe.

So even before the discovery of testosterone doctors knew about and most of them acknowledged the existence of a male menopause according to Rodhe. Not only did Rodhe support the idea of a male menopause but he went a step further and said that the male menopause is worse than the female menopause which many today would argue against. He even said that the proof for the existence of a male menopause is the deteriorations of the offspring the men have when they become older which is a debated subject. Either way, Rodhe believed that men also suffered from menopause just like women and that gives an inclination of how far back in history doctors used to talk about a male menopause.

Rodhe suggests that the treatment for this disorder should in first hand be physiological, the patient should be enlightened about his disorder and to know if the prognosis is good or bad. The patient should during a period of time rest and change his environment. As for medicine he suggests bromine and other sedatives combined with iodine. He also suggests

68 Rodhe (1927), 5.
69 Ibid., 8.
70 Ibid., 7.
strychnine as a treatment and electrotherapy, electroplating of the head and spine should work and baths in different forms are effective according to Rodhe.\footnote{Rodhe (1927), 12.}

Another early doctor was Arnold Josefson (1870-1946) who wrote a book called Vad betyda insöndringsorganen för vår kropp och själ (What does the excretory organs mean for our body and soul) from 1925. He doesn’t talk about the male menopause in so many words but he does give a view on the problems of growing old. For example he writes about how more and more doctors and researchers have become more interested and concerned about aging and what it means to grow old. More researcher are searching for ways of making the old man young again. He writes about the importance of the excretory organs and that any disturbances in this system will cause different problems and symptoms. According to him it is a known fact that the excretory organs are vital for the body and its development.\footnote{Josefson (1925), 14.}

Something that Josefson writes a lot about is organotheraphy and how it has helped many men feel younger after having new testicles transplanted into them. He mentions one medical case where a young officer during the First World War lost both of his testicles through a shooting accident. His beard and mustache fell off and he got fat and his sexual potency went away. This man had new testicles transplanted into him from another man and Josefson writes that soon afterwards he slimmed down and his sexual potency returned and he is now married thanks to the transplantation. He also mentions another case where a man has had to get castrated because of a disease. This man has had two transplantations and Josefson says that after the operation there were visible differences in how he looked. He had gotten back his lost muscle strength and other features.\footnote{Ibid., 105.}

What he is showing with his book is that doctors thought that a man’s manliness and youth were positioned in the testicles. He and other doctors had tried through various methods of testicle transplantation to achieve rejuvenation of men. According to him there were many older men who got their hopes up because they thought there was a way to be young again or to at least stay younger for a while longer.\footnote{Ibid., 105f.} Josefson had very strong and high feelings that organotheraphy would help against the fight of old age. Like Rodhe he shared the idea that the functioning of the testicles can decrease with age but that the reproduction ability is still there. According to Josefson the male menopause is when a man’s sex life goes extinct and that
usually happens to men when they enter their sixties.\textsuperscript{75}

Another Swedish doctor who was active in the field of aging and its diseases was Folke Henschen (1881-1977). In 1950 Henschen wrote that outside of Sweden other countries had come a lot longer in their development in research of aging and its diseases. A lot more journals, books, meetings and solutions on diseases connected to old age were happening abroad.\textsuperscript{76} There are a lot of different disorders that appear in people who are aging. According to Henschen the endocrine organs have a particular meaning as a regulator for aging. There is no specific year in a person’s life when old age starts but instead it’s up to biology and individuality. Henschen also means that when there is a disturbance in the endocrine organs it brings on a set of problems, this is a pathological disorder and accelerate the aging which can be identified as the menopause. The endocrine organs functional changes in the form of reduced or increased hormone production are difficult to assess and it is also difficult to say what role the advanced age may have for the endocrine organs function.\textsuperscript{77} According to Henschen it is difficult to know the exact problems that old age produce but they have scientific proof that something happens with the gonads in people who age.

Swedish doctor Axel Westman (1894-1960) who wrote a lot about hormones and was active within endocrinology explains in the book \textit{Endocrinology} (1963) that the question if a male menopause exist have been up for discussion many times during his years as a doctor. He says that there is no fixed time period where the testes production stops but instead it is the case of slow-induced glands, where the production of the testes loses its vitality and strength. Even though men still have their reproduction ability long after they turn eighty there are still men in their fifties and sixties that complain about how their libido and potency have begun to diminish. Westman means that it has not been established that this reduced potency would be due to decreased production of androgen hormones, nor would decreased androgen production lead to symptoms similar to those observed in menopausal women. The problems consist mainly of low mood, lack of energy and concentration, and thus a loss of job satisfaction. In some cases, fatigue, dizziness, headache, and insomnia dominate.\textsuperscript{78}

Finnish doctor Paavo Vara (1908-1989) claims that since the reduction of function in the gonads happens during a vast period of time, it makes it difficult to properly diagnose the disorder but according to him when the man enters middle-age sooner or later he will start to

\textsuperscript{75} Josefson (1925), 110.  
\textsuperscript{76} Henschen (1950), 2269.  
\textsuperscript{77} Ibid., 2272.  
\textsuperscript{78} Westman (1963), 168.
notice changes of deterioration with his libido and potency. He may start to suffer palpitation, flushes, perspiration and depression. When men age the 17-ketosteroid\textsuperscript{79} excretion starts to diminish a lot and the excretion in the urine starts to deteriorate. According to Vara measurements of the excretion of the 17-ketosteroid in the urine shows whether a man suffers from menopause or not.\textsuperscript{80} In Vara’s experience if the 17-ketosteroid excretion within a sixty year old reduces a lot compared to younger men and the gonadotropic hormones at the same time increases, the diagnosis can be assured, he suffers from male menopause. The treatment for the male menopause was to give the man testosterone, 24 – 100 mg 3 times per week during a few weeks’ time, after that the dosage can be reduced.\textsuperscript{81}

**Difficulties in diagnosing the male menopause**

In 1960 there were still no definite answer to what the male menopause meant, some of the symptoms were similar to the symptoms women got during their menopause but there is no explanation why men would get these symptoms since reduced androgen production doesn’t cause symptoms like these but according to Westman there is a suspicion that it has a connection with an altered testicular function.\textsuperscript{82} Unlike women where the gonads stop functioning altogether the gonads in men doesn’t stop functioning, the gonads simply in a special way weakens.

Like a lot of other doctors during that time Westman was just not one hundred percent sure about anything that had to do with the male menopause. It’s true that in the 1960’s doctors knew more about the male menopause and testosterone than the doctors like Rodhe in the 1920’s did but there were still an uncertainty about why men suffered from this disorder and it was still difficult in the 1960’s to know the exact symptoms of the male menopause since the symptoms could masquerade as other disorders with similar symptoms. Doctors like Vara and Westman had to rely on the research that were available to them and in their own ways they contributed to the research because they were both adamant that men also suffered from menopause. The only real difference between Rodhe and the doctors that came after him like Westman, Henschen and Vara were the discovery of testosterone in 1935. With testosterone doctors had new ways of measuring how much men produced and excreted which the doctors in the 1920’s didn’t have access to.

\textsuperscript{79} A 17-ketosteroid is a steroid that has a ketone (C=O) functional group at the 17 position. These compounds are products of metabolization of testosterone in most tissues such as liver.

\textsuperscript{80} Vara (1960), 75.

\textsuperscript{81} Ibid., 76.

\textsuperscript{82} Westman (1963), 168.
There were also other problems with diagnosing the male menopause and Westman states that if something is weak within a man it goes against the men’s increased self-esteem, which doesn’t allow them to admit to themselves that anything is going on within their body and according to him they were willing to go to the grave without seeking any help from a doctor. This made things more difficult in trying to diagnose the disorder. During this time the ideal man was strong and he could not admit that there might be a weakness inside of him. According to the sociologist Raewyn Connell mass culture generally assumes that there is a fixed, “true masculinity beneath the ebb and flow of daily life. We hear of ‘real men’, ‘natural man’, the ‘deep masculine’. [...] True masculinity is almost always thought to proceed from men’s bodies – to be inherent in a male body or to express something about the male body”.

Accordingly it went against men’s true masculinity to admit defeat or that they had a weakness. A man’s true masculinity expressed that it was not socially acceptable for him to be anything less than what he was, in other words, he could not possibly suffer from a disorder where his libido and potency were deteriorating since they were the ones who made him a man. The men’s denial made it hard for the concept of a male menopause to break in to the medical sphere.

As mentioned above it was a real problem that men didn’t want to admit they suffered from any problems which made it that much more difficult for doctors in the 1920’s - 1960’s to fully research and understand the extent of a male menopause. It was very much still a taboo that men should admit that they who were supposed to be the stronger sex had weaknesses that were similar to female problems. The idea that men were going to experience the same symptoms and become depressive which is typically said to be female problems, contradicted a popular image of male strength and stability that still existed when male menopause first entered the medical sphere. During this time the concept of different “sex roles” were being used in explaining social behavior in men and women. Raewyn Connell writes in Masculinities (2005) that there are two approaches in which the role concept can be applied to gender. In the first approach the roles are seen as specific to definite situations, men and women are supposed to follow a specific mold as they play their specific roles. This means that men weren’t supposed to stray from their roles as the “stronger” sex in the 1920’s - 1960’s. They were not supposed to suffer from “female problems” that only made them seem weaker in the eyes of the society. The second approach in which that being a man or a woman means enacting a general set of expectations which are attached to one’s sex, i.e. the

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83 Connell (2005), 45.
sex role. In this approach there always is two sex roles in every cultural context, a male and a female one.\textsuperscript{84} “Masculinity and femininity are quite easily interpreted as internalized sex roles, the products of ‘socialization’. This concept connected smoothly to the idea of sex differences, which were so easily explained by sex roles that the two ideas have been persistently blurred since the 1940s”.\textsuperscript{85} This approach also fitted in with the ideal of yesterday, men was supposed to be the manly breadwinner, this was their duty as a man and their sex role. Luckily this has changed during time and according to John Hoberman men are more willing to admit that they also can suffer from menopausal problems; “Now many men are prepared to admit to hormone deficiencies they believe require treatment. And for the contemporary lifestyle consumer of hormones, dependence on pharmaceuticals has become more common than it was in the 1940s”.\textsuperscript{86}

Debate on whether the male menopause exist or not

There were of course those who were against the concept of a male menopause and didn’t agree with the doctors who said that men could suffer from a disorder like that. Those who claim that there is a male menopause do not stand unchallenged and proponents and critics of a male menopause as a diagnosis has come to represent two camps in a debate that is mainly expressed in international prestigious medical journals.\textsuperscript{87}

The discussions mainly concern the hormonal processes in the male body. What hormonal changes may be observed in the aging man, how to measure hormone levels, what should be considered as normal values and what symptoms can be linked to the low levels of male sex hormones are issues being discussed. Even the hormone replacement therapy’s benefits as a treatment have been debated.\textsuperscript{88}

Proponents of the male menopause’s existence allege that male menopause is an age-related hormone deficiency. It is caused by declining levels of male hormones, principally testosterone, associated with aging. Hormone level decrease, however, is not as abrupt in men as in women during menopause.\textsuperscript{89} Men’s hormone levels decrease during a long period of time but around middle-age the testosterone levels have usually dropped down to levels that

\textsuperscript{84} Connell (2005), 22.
\textsuperscript{85} Ibid., 22.
\textsuperscript{86} Hoberman (2005), 142.
\textsuperscript{87} Hansson & Esseveld (2009), 450.
\textsuperscript{88} Ibid., 450.
\textsuperscript{89} Ibid., 450f.
cause different disorders and troubles.\textsuperscript{90}

Critics of the male menopause concept mean, however, that the symptoms which are usually linked to menopause, decreased muscle strength, osteoporosis, poor stamina etc. are symptoms of processes related to the natural aging process. These processes have not been used in practical trials of hormone replacement therapy and because men do not have the same steep decreasing of hormones as women do and the reproductive ability does not end at a certain age there is no menopause according to the critiques.\textsuperscript{91}

Einar Rodhe mentions one person who he found was against the concept of a male menopause and that was Karel Frederik Wenckebach (1864-1940) a Dutch anatomist who said that a man’s sexual potency functions well into old age for a lot of men and that is proof that men can’t suffer from a male menopause. When the opposition said to him that while the gonadal generative function may be intact, the interior secretion can still be reduced, he says, that for such a process typical failure symptoms are not to be observed. His argument shows that there were early on those who opposed a male menopause and saw it as part of the natural aging of men.\textsuperscript{92}

Many who oppose a male menopause think since there is no male equivalent to the loss of fertility accompanying the onset of menopause like there is for women, men can’t suffer from it. Since there is no built-in, genetically controlled process of testicular senescence as there is for the ovary, it’s the contrary in men, there is a genetically encoded ability to produce sperm throughout life. Many who don’t believe in a male menopause do so because of the fact that men don’t lose their reproductive ability.\textsuperscript{93}

Then there are those who say that despite the fact that the sperm production continues, secretion of hormones by the testis can decline and when men get older it is not uncommon for vascular changes to affect the testes, the pituitary, or the brain and indirectly cause a decrease of testicular hormone production.\textsuperscript{94}

On the website Hormone Health Network the consensus is that the male menopause is a myth and that the term menopause only pertains to the female condition when the ability to reproduce is halted. They say that what is sometimes thought of as being a male menopause really is just low testosterone levels. “The drop in testosterone is inaccurately classified as ‘male menopause’ when in fact, should simply be considered a symptom of male aging, more

\textsuperscript{90} Hansson & Esseveld (2009), 450f.
\textsuperscript{91} Ibid., 450f.
\textsuperscript{92} Rodhe (1927), 6.
\textsuperscript{93} Sheldon J. Segal & Luigi Mastroianni (2003), 80.
\textsuperscript{94} Ibid., 80.
clinically referred to as testosterone deficiency syndrome, androgen deficiency of the aging male, and late-onset hypogonadism.”

Some critics also point out that; “an abnormally low concentration of testosterone may occur because of testicular dysfunction or secondary hypogonadism and may be congenital or acquired”. Low testosterone levels doesn’t automatically mean that it is connected to the male menopause.

Endocrinologists Sheldon J. Segal and Luigi Mastroianni are on the other side of this debate and writes in *Hormone Use in Menopause & Male Andropause*:

Androgen decline in the aging male is a fact of life. It leads to a syndrome in aging men consisting of physical, sexual, behavioral, and psychological symptoms that include weakness, fatigue, reduced muscle and bone mass, impaired red blood cell production, reduced or absent sperm production, sexual dysfunction, depression, anxiety, memory impairment, and reduced cognitive function. While the physiological events that cause this change of life are not the same as the reasons for estrogen decline in women, the result is similar to menopause.

The reason why some are against a male menopause is because it is characterized by a pattern that may not be easily differentiated from an age-related physiological decline in general health. Some also claim that; “the term ‘male menopause’ is inappropriate because it suggests a sudden drop in sex hormones such as it occurs in women in the premenopausal state”.

Ever since scientists and doctors first started discussing this concept there have been arguments as to what to call it and which symptoms best represent the disorder. Since the male menopause is not a clear-cut, easily identifiable, or definable condition this conceptual confusion will most likely continue to exist until there is a consensus among the medical profession on whether the male menopause exist or not, as it stands today it’s still a long way off. The Swedish doctors, Rodhe, Henschen and Westman was also not sure about the male menopause. They said it existed but they didn’t fully understand what it was. Their ideas about it was that something does happen with the male body when it grows older but why all of these changes happen they don’t know exactly why. Doctors today face the same discussions about the male menopause as the doctors of the past did.

As I mentions above the Swedish doctors didn’t entirely have a complete grasp of what a male menopause was but they understood that when men grow older different things happen with them. It was that fascination which made them want to explore more about aging and

97 Ibid., 858.
98 Sheldon J. Segal & Luigi Mastroianni (2003), 84.
what happens when men grow older. Unknowingly they have contributed to the medicalization of aging and consequently the male menopause. One important and driving factor in medicalization is consumers and the Swedish doctors showed that there was a lot of men (consumers) that was in need of help. They showed that there was a marked for male disorders especially aging and that it needed to be seen as a disease and not just something unexplainable that happens to men. From studying the Swedish doctors it shows that they believed men’s aging was a disease and in their own way they helped with the medicalization of aging. Early on they wrote about it and showed how the disease effected men and they helped future doctors and scientists to medicalize this disorder. Without the medical research that the Swedish doctors did and others too, modern doctors would not have the same foundation as they do and perhaps the medicalization of aging and the male menopause would not have happened. When the Swedish doctors diagnosed men with disorders connected to aging they brought more individuals, life stories and problems into the medical sphere just as Peter Conrad said medicalization would do. With medicalization an ailment or problem needs to be defined as one before it can be medicalized and in that way they have also contributed to the medicalization because they showed aging was a problem.
Chapter 3. Testosterone the miracle drug

Paul de Kruif and *The Male Hormone*

In contrast to what was going on in Sweden there was a man in the USA named Paul de Kruif (1890-1971), an American microbiologist and author who in 1945 published a book called *The Male Hormone*. In this book he writes about himself and how he has noticed the way his body has started to deteriorate as he got older. Frustrated with how his body was failing him, he came in contact with hormone treatment which in 1945 was still a fairly unexplored concept especially for those who still remembered the debacle of Vornoff’s monkey glands. He writes how doctors were more concerned with saving the lives of young people and neglecting the older.

To tell the truth, medical science had been an absolute flop in its unorganized and feeble effort to check the dissolution and death that marched toward all middle-aged men and women. Men of science cut themselves splendid pieces of cake for their saving of babies, children and young people from many microbic deaths, but they had nothing to offer to push back on the on-rushing disease of old age. It seemed as cruel as it was idiotic and wasteful. It seemed as if the young were preserved to a time of the beginning of wisdom and serene enjoyment of life, then to begin to crack up with the diseases of degeneration, then to be told by science, ‘We were only fooling you’.

De Kruif’s statement about old age and the diseases connected to it made him want to search for something that could help him with his ailments of old age. There was one doctor Herman Bundesen that said to him that it is not possible to throw advanced age into reverse, but there might be a chemical promise of prolonging what was left of his prime of life. The doctor said he was suffering from hormone hunger. De Kruif was certainly skeptical of this way of restoring a man’s waning energy by the male sex hormone and according to him this treatment was not generally admitted by the authorities on the new science of hormones who were discussing the subject in widely read medical journals. He also writes; “that the quest of the male hormone got a very slow start compared to the study of other parts of our living machinery that bloomed so brilliantly in the past one hundred and fifty years.”

Soon de Kruif started thinking differently about hormone treatment and changed his mind about its effectiveness. De Kruif argues that in the beginning doctors were not accepting of the new hormone treatment but after the organic chemists had revolutionized medicine, now the doctors of the organic chemists were transformed from perpetrators of laboratory into

101 De Kruif (1945), 10.
102 Ibid., 15.
103 Ibid., 58.
lifesaving leaders.\textsuperscript{104} All the new medicines like the sulfas and atabrine showed that organic chemists also could save lives. “In a few years these wizards of the stills and chemical kettles had made possible the saving of more human life than all the doctors with their knives and pills and herbs and simples and kindly bedside manner had saved in all human history.”\textsuperscript{105}

After taking part in this hormone treatment with testosterone de Kruif started to believe that the male hormone testosterone was vital to the chemical cog to our human machinery. De Kruif went away from his doctor Herman Bundesen feeling strong and youthful despite that he was still suffering from old-age. To say the least de Kruif truly believed in this new hormone treatment and he believed in the miracle of testosterone. He was one of the first to publicly advocate the testosterone therapy for aging men and he declared that; “the male hormone was now ready for the trials of its possible power to extend the prime life of men”.\textsuperscript{106}

De Kruif only had high praises for the new hormone testosterone which he thought had an absolutely fantastic power. Apparently if it was injected into female rats, it changed their girl babies toward boys in the rat mother’s womb. He also says that it sped up the tempo of developing life outlandishly and it could make male baby roosters crow within sixty hours after they were hatched from the egg.\textsuperscript{107} It was clear to de Kruif that testosterone only worked on men who lacked natural male hormone and it was then that testosterone showed its magic power. This also showed according to de Kruif that the new male hormone was unable to relieve the sexual impotence of men whose sexual apparatus seemed normal. What testosterone could do according to de Kruif was;

\begin{quote}
It could make men of human beings who'd remained tragically boyish far beyond the ordinary time of puberty. It could resurrect men who had been broken by castration, by disease, or by accident, so that a new sap flowed through their feeble and flabby muscles; so that their gray skin that had failed to tan to sunshine, now began to bronze; so that their thoughts ran strong and uninterrupted by their old self-pity; so that they were actually transformed from prematurely aged men to energetic, cheerful, social beings.\textsuperscript{108}
\end{quote}

Testosterone could also help older men who was feeling irritable, excitable, melancholic, and impotent and de Kruif also reported on a man after two weeks of testosterone treatment began to be sexually normal and calm and almost completely out of his mental depression, the signs of what the doctors would call a male menopause.

De Kruif states all of these amazing things that testosterone could do in his book and he

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\textsuperscript{104} De Kruif (1945), 84.  
\textsuperscript{105} Ibid., 91.  
\textsuperscript{106} Ibid., 208.  
\textsuperscript{107} Ibid., 93.  
\textsuperscript{108} Ibid., 117.
\end{flushright}
was very adamant about that it had worked wonders on him especially when he says that he saw science as a gleam of hope to help him extend the prime of his life and that testosterone really had helped him. Throughout his book he never stops elevating testosterone and makes it sound like a miracle drug even though the scientists don’t know enough about the risks in the testosterone treatment. De Kruifs experienced rejuvenation could easily have been suggestion that he thought he was getting more confident in himself. He could have easily been effected and convinced by Doctor Herman Bundesen that the testosterone treatment was helping him. He certainly seemed to be fixated by the idea of this new hormone treatment with testosterone and he didn’t seem to take any of the critique against it seriously because he was hell-bent on it to work because he was afraid of his own mortality. Of course it is easy to understand that if someone is feeling his life-force slipping away that he is quick to believe that this new testosterone treatment might help him especially when his doctor is praising it so much. It is not a surprise that testosterone is popularly thought of as a sex hormone whose primary role is to turn boys into men and thereafter maintaining their libido and ability to have erections for sexual activity.

Paul de Kruif himself was a driving factor in medicalization of aging. His book and the promotion that he did of testosterone treatment is a way to try and medicalize it. Since consumers are a contributing factor in the medicalization of disorders de Kruif tries with his book to promote it to the public. He wanted to promote the male hormone therapy for the masses and when his book was first published in 1945 it was first excerpted in the newspaper Reader’s Digest and Newsweek devoted a full page to his book when it came out. De Kruif was convinced that old age was a disease that could be treated with testosterone and that is why he tried so hard to promote it to the general public and why he was an early example in trying to medicalize aging and testosterone. Perhaps if pharmaceutical companies’ campaigns on testosterone had been more successful during the 1940’s together with de Kruif’s own promotions the medicalization of aging and disorders connected to it like the male menopause would have happened earlier.

Compared to the Swedish doctors Paul de Kruif is very adamant on the fact that testosterone can and will help men. Of the doctors that I have researched it is only Paavo Vara that recommended testosterone treatment but not to the same extent as de Kruif did. He didn’t seem overly confident that it would help as much as de Kruif thought. Vara thought more that it could perhaps relieve some of the symptoms such as dizziness and fatigue, not that it was

going to cure anyone from the symptoms of becoming old. It is interesting how neither Folke Henschen nor Axel Westman writes about testosterone treatment but Vara did, of course not to the same extent as de Kruif but still. It’s clear that testosterone probably did not have as much of an impact in Sweden as it appears to have had in the USA. From reading the Swedish doctors texts none of them had as much faith in testosterone as de Kruif had and that shows how differently they must have seen testosterone and its powers to cure.

**Miracle drug?**

After the isolation of testosterone this newfound ability to produce the male hormone in the laboratory generated a big interest to try to establish its clinical uses. According to Peter Conrad testosterone became a drug in search of a disease to treat and there was a very big excitement and increased optimism in what this drug could do. Testosterones newfound “fame” was particularly evident in medical journals following its isolation in 1935. Articles on testosterone illustrated the dramatic effects testosterone therapy could have on aging men. Often were the men before they had tried the new testosterone treatment described as being desperate, broken down, pathetic and had little ability to function in a society that demanded so much of them. Early pharmaceutical companies had a lot staking on testosterone and they took the excitement and expectation of the isolation of testosterone and translated them into marketing strategies that targeted physicians. Early on it was companies such as Schering, Oreton and Ciba who mostly promoted the use of testosterone therapy for the treatment of various disorders to the medical community. Initially the new therapy was indicated for the treatment of sexual underdevelopment, hypogonadism and testicular failure but Schering saw an opportunity to market and sell it as a treatment to a lot of other ailments, one of them being the male menopause. “Such promotion of testosterone for male menopause was profit driven, as ‘sexual underdevelopment was too rare to constitute a substantial market’. […] They thus worked to develop a wider market for testosterone, with advertisements (again targeted to physicians) portraying testosterone as a magic pill that could work for middle-age patients”. There is no wonder men like Paul de Kruif was swayed and convinced this was helping him and that it was sort of a magic drug. In the advertisement it was suggested to the physicians that the use of testosterone, this miracle drug would without a

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110 Rothman & Rothman (2003), 151.
112 Ibid., 29.
113 Ibid., 29.
114 Ibid., 29.
doubt fix the problems that afflicted their aging male patients, such as fatigue and sexual apathy.  

Testosterone has during its lifetime been viewed as many things. “It has been regarded as a rejuvenating drug, as a sexually stimulating drug, and as a doping drug that builds muscles and can boost athletic performances”.

John Hoberman also explains that:

Testosterone became a charismatic drug because it promised sexual stimulation and renewed energy for individuals and greater productivity for modern society. Physicians described the optimal effect of testosterone as a feeling of ‘well-being,’ a term has been used many times over the past half century to describe and characterize its positive effect on mood. In the early 1940s testosterone was hailed as a mood-altering drug whose primary purpose was the sexual restoration and reenergizing of aging males. The sheer numbers of these potential patients suggested that they would eventually constitute a lucrative market.

Today there are obviously still men who take testosterone supplements because it has not in this day and age escaped men’s attention that physical, mental and emotional changes marks their advancing years. The idea that there is something that can help and be done about these age-related symptoms is very appealing to men and it has sparked a growing interest in testosterone once again. It is with great expectations that men still take testosterone supplements because they think it will enhance their sexual prowess to youthful physical robustness and elderly men hope that taking hormones will help them escape the fate of old age like lethargy, memory loss and frailty. Even though hormone therapy is gaining popularity with modern men their expectations from this therapy are more than often unrealistic.

According to Segal and Mastroianni testosterone therapy is not a pathway to eternal youth and it is not this miracle drug physicians and men of the 1940’s thought it were. It is merely a treatment, a tool in trying to ease symptoms of old age. Like any other medicine, testosterone carry both benefits and risks. Physicians in the 1930’s and 1940’s didn’t know the side-effects and risks that testosterone could give since it was so new and hadn’t been part of many medical trials. Still physicians prescribed it to men because they thought the benefits outweighed the risks. Today it is more widely known that testosterone therapy brings certain risks.

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116 Hoberman (2005), 1.
117 Hoberman (2005), 3.
118 Sheldon J. Segal & Luigi Mastroianni (2003), 90.
119 Ibid., 90.
The medicalization of the male menopause and testosterone

Moving away from the period 1920’s – 1960’s the essay are now entering modern times with the medicalization of aging and hormone treatment. Peter Conrad writes that medicalization can be defined as a social process were a previously normal human condition (like aging) becomes a medical problem in need of treatment by medical professionals. “Medicalization changes ones understanding of a specific condition from a variant upon human social nature to a deviation from normal biological functioning, something that can be treated through the use of biomedicine. Often times this change is achieved through the labels of illness, disease, or disorder”.¹²⁰ According to Conrad medicalization is dynamic and frequently it can be expanded in new directions and one of these new directions is how aging men’s lives and bodies are increasingly coming under medical jurisdiction.

Television programs about successful aging, magazine articles about the best therapy for hair loss, and images used to promote the latest erectile dysfunction medication consistently tell men to ‘see your doctor.’ This movement of aging from a natural life event to a medical problem in need of treatment […] is an example of medicalization. While earlier studies have pointed to the medicalization of women’s bodies, we now see aging men’s bodies becoming medicalized as well.¹²¹

In Medicalization of Society Peter Conrad examines three cases in the medicalization of masculinity: andropause, baldness and erectile dysfunction. One reason as to why these conditions became medicalized is the longstanding desire from both men, medical professionals and entrepreneurs to achieve old age with the men’s masculinity somewhat still intact. They also have a desire to grow old and still have the qualities of youth within them like physical strength, energy, hirsutism and sexual vitality. “Thus, the medicalization of male aging, baldness, and sexual performance, while currently driven by the medical and pharmaceutical enterprises and accelerated by direct-to-consumer advertising, is also fueled by men’s own concerns with their masculine identities, capacities, embodiments, and presentations”.¹²² Conrad also writes that male menopause and baldness have only been partially medicalized because there is no consensus about whether these constitute medical conditions and their pathology is difficult to measure and assess. However since the introduction of Viagra, erectile dysfunction has become gradually medicalized and since erectile dysfunction is supposed to be a symptom of male menopause, it can be reasoned that the male menopause is partially medicalized. Nevertheless male menopause, baldness and erectile dysfunction are examples of the growing medicalization of men’s bodies and

¹²² Ibid., 23.
masculinity.\textsuperscript{123}

During the second half of the twentieth century testosterone therapy as a treatment for male menopause declined in popularity but it never disappeared altogether. It is thanks to the technological advances by the pharmaceutical companies and their distribution of these new drugs, which have sparked a new interest in this treatment. Pharmaceutical companies are always on their lookout for new ways to deliver testosterone. They are always on the search for treatments that are convenient and attractive. If they can find a treatment that is both effective and convenient more men are likely to participate in the treatment. Already on the market today is oral preparations of testosterone, in the form of pills (which are easy to take) but this treatment is also problematic because they do not maintain a constant level of the hormone in the body and it may cause liver damage. Then the pharmaceutical companies thought of injections of testosterone but injections are uncomfortable for everyday use. It also produces a high of the hormones and then a fall which are often followed by mood swings, libido and energy.\textsuperscript{124} On the market are also patches which is worn on the abdomen, back, thighs, or upper arm and this way of treatment maintain a steady level of the hormone but it may be uncomfortable or fall off. The newest idea and product pharmaceutical companies have launched is a clear, odorless transdermal gel which can be rubbed onto the shoulders once a day without any irritating effects.\textsuperscript{125} Even today when doctors and patients know that taking testosterone isn’t without its risks the promise of testosterone therapy has an almost magical allure for many people, including clinicians, their patients and even the public.\textsuperscript{126} “Testosterone is often portrayed as a miraculous substance, with amazing power to restore or enhance masculinity. The metaphors for testosterone in the public media illustrate the magical light in which the male hormone often is viewed. Men become complicit in their own medicalization with the promise that such treatments can produce astonishing results”.\textsuperscript{127} There are a number of testosterone products on the market that people can buy without a prescription from a doctor. There are testosterone supplements being sold at regular grocery stores, for example Walmart are marketing and selling a product called Testosterone Boost which promises a change within 7 days. On the website Flexonline there is a supplement called Androtest being sold and it is called a natural testosterone enhancement.

\textsuperscript{123} Conrad (2007), 24.  
\textsuperscript{124} Ibid., 31.  
\textsuperscript{125} Ibid., 32.  
\textsuperscript{126} Ibid., 33.  
\textsuperscript{127} Ibid., 33.
Prescription free supplements as the ad above show clearly how the medicalization of testosterone have developed from being something only doctors have access to and now anybody who wants it can buy it. Conrad writes that millions of aging male baby boomers compose an attractive market for both the media and pharmaceutical manufacturers. Testosterone replacement therapy has become an important component of the medicalization of aging male bodies. Ads like this shows just how mainstream and part of everyone’s life testosterone replacement therapy has become.

Testosterone has not always been this mainstream, it is only after the medicalization of men’s lives that a lot of medical testosterone-based treatments started being offered to men in order to help them with their aging. Ever since the introduction of Viagra in 1998 there has been an expansion and redefinition of male sexual performance and erectile dysfunction. After the launching of Viagra, a larger interest in male disorders and their bodies started taking form and this new medicine was a strong reason as to why the medicalization of men started.

Conrad writes that scholarly examinations of gender and medicalization have largely focused on the medicalization of women while the medicalization of men’s lives has mostly been ignored, but that started to change with Viagra. It shows clearly with all the literature on the medicalization of childbirth, premenstrual syndrome, menopause and anorexia in women that the medicalization of men’s lives have been overlooked. One reason for this is because some have argued that men are not as vulnerable to medicalization as women are, but clearly this have changed after the emergence of Viagra. With the medicalization of men it shows that men wants to resist the aging process with the help of various treatments like Viagra-like drugs and with medicalization it has become a growing market for testosterone. This growing market is probably why regular stores sell testosterone supplements that most likely won’t help at all.

Perhaps this is what Paul de Kruif envisioned when he first started promoting testosterone in the 1940’s that it would become a part of everyday life and that it would be this easy to get access to. He predicted that testosterone treatment would get a flourishing and steady future and it did only it happened circa sixty years after he first said it. None of the Swedish doctors had any grand visions of testosterone being a reliable treatment at least not in their articles, books and book chapter that they wrote. It is difficult to say if they saw a future where men’s

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129 Ibid., 24.
130 Ibid., 26.
aging would be medicalized and part of the medical sphere. They believed in men and their disorders being part of the medical world since they all wrote about aging of men and the disorders connected to it and in that way, without knowing it they contributed with their research to the medicalization of aging. Their research at least in Sweden put the aging of men and their problems on the agenda and showed that there were men suffering and that more research was needed because they knew too little.
Chapter 4. The male hormone as a “cure” for homosexuality

Already in the 1920’s with the practice of organotherapy doctors thought that they could “cure” homosexuality with transplantation of the male and female sex hormones. This idea had its roots in that between 1890 and 1910 the Viennese physiologist Eugen Steinach performed transplantation experiments on animals demonstrating that sexual development was dependent on secretions from the sexual glands. Until the middle decades of the twentieth century, doctors attempted to treat homosexuality as both a biological defect and a psychological disorder. Those who believed that homosexuality was a biological defect attempted to cure it by administering hormones, following in the tradition of Viennese endocrinologist Eugen Steinach, who first suggested in the 1910s that hormonal imbalances could lead to abnormal sexual behavior.131

He transplanted female sex hormones into castrated male mice and they then developed female sexual characteristics and the castrated female mice developed male sexual characteristics. According to him the males developed a female psyche with female sexual desires, his behavior was that of a female. He thus thought that there was a transformation of the sexual characteristics after the transplantation. He thought that he had proven that the sex hormones worked gender-specific. He thought that he surgically could make hermaphrodites and homosexual animals.132

Swedish doctor Arnold Josefson also writes about how transplantations had been done on another group with sex hormone disturbances – the homosexual individuals. According to him the results of the operations that had been done, had been positive and it’s through these transplantations that the sexual urges had become more natural in the patients.133 Even though he wrote that there have been good results, he still thought there could be more done about this deviation. During the 1920’s doctors knew more about how the body worked and that the endocrine organs were important and that development helped them to know more about why for example dwarfism and gigantism happened. According to Josefson these discoveries helped people to form a more humane idea about people with disorders like that. He says that their disorders were part of the “normal deviant human types”, because now there were an

132 Eugen Steinach, Föryngring genom experimentellt upplivande på nytt av den åldrande pubertetskörteln (Stockholm, 1925), 7f.
133 Josefson (1925), 105f.
explanation to their disorders but the same thing could not be said about homosexuality. He didn’t view homosexuality as a “normal deviation” but as an abnormal deviation. He writes: “The poor homosexuals could possibly only hope for the day when their innate pathological appropriations could be changed.” Josefson thinks that the most important and most humane future goal within organotheraphy should be to develop an organ therapeutic way of treatment for the antisocial, homosexual individuals.

During Josefson’s time homosexuality was viewed as an anomaly and the most important sex organs in the male were the testicles and in the female the ovaries. Before the discovery of testosterone in 1935 doctors knew that the testicles produced a substance (hormones) which was responsible for physical and mental virility. This substance was thought to be responsible for physical and mental masculinity and femininity. After scientists discovered that men and women both produce a certain amount of male and female sex hormones sex endocrinologists came to the conclusion that if a man produced too much female sex hormones that would cause different disorders in his masculinity and one of these “disorders” were homosexuality. The idea was that in the normal male, the male hormone predominates and that was the cause of the normal sex attraction but in the homosexual man the dominance is then reversed. In a homosexual man the predominance was the female sex hormones. “This conceptualization of homosexuality was perfectly in line with the then prevailing ideas about homosexuality.”

Experiments on homosexuals
One Swedish doctor, Erik Lundberg, studied the follicular levels in homosexual men in an attempt to try and see if this steroid hormone had any impact on homosexual men. His idea was that with the help of follicular injections doctors would be able to tell if a man was homosexual. It was during his research on clotting in hemophilia patients that he noticed that follicular decreased clotting very significantly in sexually mature female rabbits in

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134 Josefson (1925), 15.
135 Ibid., 15.
136 Ibid., 112.
137 Magnus Hirschfeld, Sexual anomalies and perversions (London, 1944), 40.
139 Folliculin a steroid hormone that belong to the group estrogens, and it is a female sex hormone although both sexes have it.
comparison to sexually mature male rabbits. To verify connection between coagulation and gonadal condition of the animals, he continued, with the attempts to castrate and implanting the sexual glands of the opposite sex of the animals. During the different periods, determinations of the clotting time was made and there was now no doubt that the animals during the period they female after injection of follicular gets a decidedly shorter clotting time. Against this background the question became, was it possible to use these clotting changes after follicular injections to objectively demonstrate the existence of homosexuality. Since there was an idea that if men had a predomination of female sex hormones he was homosexual and with this coagulation method Lundberg hoped he could determine who was homosexual or not depending on the clotting time and the amount of follicular excretion in homosexual men. Besides the “official” sex and its gonads Lundberg says that there could be glandular remnants of the opposite sex, memories of an earlier embryonic stage of development in homosexual men and he says that could be the cause of homosexuality.

Lundberg was given permission by the Central Prison in Långholmen to do experiments on homosexual individuals that were inmates there. During his experiment all of the test subjects’ urine was collected and the follicular levels were studied. The experiments were conducted in a way where all the allowable urine had been collected to serve as a control. During three days the test subjects received 8,300 to 10,000 Mouse Unit follicular injections. During the trial days all urine were collected and one liter was taken to be analyzed and to extract the follicular from the urine. The extract from each urine sample was then collected in 25 cc of sesame oil, which in the later trials had undergone various dilutions. These dilutions is then injected over two days (three times each day) into immature mice (0.1 cc every time). Three days later, vaginal samples were taken, which was continued for three consecutive days. Lundberg considers the result positive if 75% of the animals react to the injections in their vaginal secretions. He conducted three tries where he says that the results were positive. According to him in “normal” men you can only find 2-3 % of the injected follicular in the urine but in the homosexual men that where his test subjects he says that he found much higher levels of follicular in their urine, much more than only 3%. With one of the men he claimed that the follicular levels was so high that it is almost the same amount as in the secretion of a pregnant woman. Lundberg says; “And this man is serving a four year

140 Lundberg (1934), 561f.
141 Ibid., 564ff.
sentence of hard labor for his abnormal sexual deviations.”

He continues by saying that:

“These survey results are very interesting. If these phenomena are repeated in great numbers in following studies of the homosexuals and while lacking in others, it seems as if there is a purely objective method to demonstrate the existence of constitutional homosexuality.”

Lundberg wrote that he was inspired by men like Eugen Steinach and Bernard Zondek. During Lundberg’s experiments there was an assumption that homosexual men were considered more or less “feminine” so that a connection with female sex hormones as the agents of femininity seemed likely to him. He thought that homosexual men had remnants of female gonads within themselves and because of that their follicular levels were high like women’s usually were.

During the 1930’s the idea of decriminalizing homosexuality emerged in the Nordic countries but there were fierce oppositions to decriminalization. The arguments against it were that homosexuals were inferior and abnormal creatures with physical abnormalities such as longer legs and smaller genitals. Homosexuals supposedly also carried an increased risk of developing schizophrenia. Many also considered homosexuality as an abnormal and undesirable disease that needed to be fought. It was against this background that Lundberg conducted his experiments and he wrote that if his method would work in knowing who is homosexual or not they could be treated for their disease rather than being imprisoned. Even if homosexuality was viewed as a disease instead of a crime like Lundberg did, it didn’t mean that the experiments stopped or that homosexuals had it any better because there existed doctors like Lundberg who thought they could “cure” this disease, so the experiments continued.

A clear shift occurred in the perception of homosexuality in the 1930s and homosexuality was widely removed from the penal code in the Nordic countries, at least regarding the consensual sexual act between two men over 21 years old, but this did not liberate homosexuality itself. It was, rather, transformed from the realm of crime to the world of mental illness. And as the castration legislation sought to cure mental illness by operation, homosexuals became desirable candidates for this surgical procedure.

With the decriminalization of homosexuality it was then viewed as a mental illness and doctors thought if they castrated homosexuals their libido and sexual preferences would stop. Homosexuals became the main target groups for castration because it was believed that castration could cure hyper sexuality and an abnormal sex drive that they though homosexuals

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142 Lundberg (1934), 566.
143 Ibid., 567.
144 Wessel (2015), 600.
had. Castration was recommended and in some cases it was recommended that it was accompanied with a transplantation of the testicles of a heterosexual man.\textsuperscript{145}

Moving away from organotherapy

Nelly Oudshoorn writes that; “In the 1930s the laboratory tools developed to study sex hormones were applied to measure the “male” and “female” factors in homosexuals. Physicians tested urinary extracts of homosexual patient and the vaginal smear test was applied to check for the presence of the female element.”\textsuperscript{146} Within the endocrinology field homosexuality was defined as an endocrine imbalance. While endocrinology tried to move away from organotherapy there were still those who believed in its power to cure certain diseases, homosexuality being one of them but with the introduction of tests to measure sex hormones in human bodies it provided clinicians with means to replace gonadal transplant operations with hormone treatment.\textsuperscript{147}

The move away from organotherapy was made easier with the availability of synthetic androgens by the late 1930s. “This transformed the practice of clinical endocrinology by rescuing male sex hormone therapy from the pseudoscience of human gland grafting.”\textsuperscript{148} According to Hoberman this move to endocrinology and with the medical view of homosexuality it was not surprising that there were attempts to use injectable testosterone propionate to reverse homosexual orientation. He also claims that the endocrine theory of homosexuality (that the bodies of homosexuals contained less male hormone and more female hormone) was attractive since it promised a cure by drugs that were already on the market.\textsuperscript{149}

Physicians expected that sex hormones could be used as specific drugs for the treatment of homosexuality. Not long after the first sex hormones were chemically identified and synthesized homosexuals became increasingly treated with “sex appropriate” sex hormones to change their sexual orientation. Not only in Sweden but in the USA there were numerous male homosexuals treated with male sex hormones during the 1930’s and 1940’s.\textsuperscript{150} The idea with the treatment were to effectively restore individuals of unusual chemical endowment to normal. During this time physicians were confident in their ability to assay hormone levels
and in that way they could claim that homosexuality was rooted in abnormal sex hormone ratios. This theory of the cause of homosexuality were supported by some pharmaceutical companies who saw a potential new market for synthetic testosterone.\textsuperscript{151}

**Medicalization and demedicalization of homosexuality**

Homosexuality went from being considered a crime for a long time and then being medicalized into being a disorder, a disease. According to Merle Wessel it has been argued that the decriminalization of homosexuality did not lead to any sort of sexual liberation but instead to much harder restricted sexuality through medicalization. The medicalization of homosexuality was another way to restrict sexuality and trying to suppress it according to Wessel.\textsuperscript{152} The medicalization of homosexuality had its roots in physicians who argued that it was a treatable disease like the Hungarian physician K.M Benkert (1824-1882) who in the end of the nineteenth century argued against the repressive laws and harsh punishment of homosexuals. He thought that such treatment was unjust and ineffective because homosexuality was congenital rather than acquired. His definition of homosexuality was that it was a medical pathology rather than a criminal offense. Another nineteenth century physician was Richard Kraft-Ebbing (1840-1902), a German physician-psychiatrist who argued that most cases of “sexual inversion” (his definition for homosexuality) results from a congenital weakness in the nervous system.\textsuperscript{153}

He argued that homosexuals could not change the direction or the expression of their sexual desires and therefore should be treated therapeutically rather than punitively. He called not for sympathy, but understanding [...]. Thus, the original medicalization of homosexuality was meant as a form of protection against oppressive legal sanctions, although oppressive medical practices still emerged in psychiatric attempts to change homosexuals into heterosexuals.\textsuperscript{154}

After several physicians argued that homosexuality was a form of mental illness and that psychoanalytic treatment were efficient for changing homosexuals into heterosexuals the final piece for the medicalization of homosexuality according to Conrad came when it was included in the American Psychiatric Association’s (APA) official classification of psychiatric disorders. Conrad writes that homosexuality was categorized under “Personality Disorders and Certain Other Non-Psychotic Disorders, specifically under Sexual Deviation. Homosexuality was now an official mental disorder, a psychopathology. But this definition

\textsuperscript{151} Hoberman (2005), 98.
\textsuperscript{152} Wessel (2015), 592.
\textsuperscript{153} Conrad (2007), 98.
\textsuperscript{154} Ibid., 98.
would soon be challenged.”

From the 1930’s to the 1970’s or even until the 1980’s in some countries homosexuality was viewed as a disease trough medicalization but there are a few disorders that have been demedicalized. Homosexuality is a case where medical definitions and treatments are no longer an appropriate way to describe it. Demedicalization occurs according to Peter Conrad when a problem is no longer defined as medical, and when medical treatment is no longer deemed appropriate. In the 1970’s homosexuality was demedicalized with the help of the gay liberation movement in the late 1960’s. This gay social movement sought to end the persecution and discrimination of homosexuals and they fought to establish gay civil rights. With the liberation the definition of “gay pride” emerged which showed the image of the “healthy homosexual” which both contradicted the official medical view and the public statements of vocal psychiatric opponents. Gay activists and their allies set out to change the psychiatric definition and treatment of homosexuality. The activists convinced the APA that changes needed to be done in the classification of homosexuality. The APA changed it so that homosexuality by itself was not a diagnosis or illness, it was only those individuals that were unhappy with their sexual orientation who were said to have a disorder.

The resolution was accepted by the APA Board of Trustees in December 1973, and a few months later it passed by APA vote. The new diagnosis, ‘sexual orientation disturbance (homosexuality)’, would replace the existing medicalized definition of homosexuality. Homosexuality had been demedicalized and, at least officially, was no longer to be considered an illness […]. Although it is unclear how much the demedicalization itself improved the lives of gay men and women, it was clearly a symbolic victory. A major professional association had voted the disease of homosexuality out of existence; homosexuals were no longer officially deemed sick, and this was public knowledge.

Homosexuality has thus been both medicalized and demedicalized.

156 Ibid., 120.
157 Ibid., 99.
158 Ibid., 100.
Chapter 5. Concluding analysis

It has been clear throughout this essay that male menopause and testosterone are two debated and highly discussed subjects. They have been controversial since they first emerged and in this analysis I will discuss why the male menopause and testosterone didn’t have the same breakthrough as the female menopause and estrogen had on the medical market. I will also discuss how the Swedish doctors and Paul de Kruif thought about testosterone, if anyone had any warnings about it. I also discuss some of the risks and problems that testosterone and other androgen supplements could cause but first I am going to discuss my main questions of this essay which are how the medical researchers have explained the male menopause. How the ideas about the male menopause, testosterone, hormones and aging connect to each other and if they have changed during time and how they are expressed in the sources I use. The last question is why the doctors had the idea that homosexuals could be cured with testosterone and other hormones.

The medical researchers and the Swedish doctors explain the male menopause as something that happens to men when they get older. None of them seem to really have a clear understanding as to why it happens and the treatment for it isn’t always easy to determine. To Einar Rodhe the male menopause is something that occurs because of disorders in the nervous system and from the genitourinary sphere. According to him men that suffers from menopause also suffers from a weaker mind since the symptoms of the menopause is very exhausting and because of this the mind starts to deteriorate. Arnold Josefsson says the male menopause happens because men’s sexual drive, their libido deteriorated. According to him when a man’s sex life goes extinct and that usually happens to men when they enters their sixties they suffer from menopause. To Folke Henschen the male menopause is a disturbance in the endocrine organs and that brings on a set of problems. Male menopause is a pathological disorder and accelerate the aging and the endocrine organs functional changes. According to Henschen it is difficult to know the exact problems that old age produce but they have scientific proof that there happens something with the gonads in people who grow older. Axel Westman says that there is no fixed time period when men enters menopause and there is no fixed time when the testes production stops, instead it is the case of slow-induced glands, where the production of the testes loses their vitality and strength. Westman means that it has not been established that this reduced potency would be due to decreased production of androgen hormones, nor would decreased androgen production lead to
symptoms similar to those observed in menopausal women. The problems consist mainly of low mood, lack of energy, concentration and in some cases, fatigue, dizziness, headache, and insomnia dominate.\textsuperscript{159} Westman is in no way certain as to what the male menopause is, he just knows that something happens when men grow older. Paavo Vara says the male menopause is when the reduction of function in the gonads happens and when the man enters middle-age sooner or later he will start to notice changes of deterioration with his libido and potency. This is how the medical researchers explain the male menopause and it mostly concurs with my secondary sources on the male menopause because still today doctors are unsure on what happens when a man enters menopause. What does not concur with the secondary sources is that the Swedish doctors all seemed to be adamant on the fact that men suffers from a male menopause and that aging brings with it certain disorders. Modern doctors are not this sure about the male menopause some doesn’t believe men enters a menopause and that disorders connected to aging is just part of the natural order in life, while the Swedish doctors wasn’t sure just what a male menopause they all seemed to agree that it existed.

The ideas about the male menopause, testosterone, hormones and aging connect to each other according to the Swedish doctors and Paul de Kruif when men age they encounters lots of problems that mostly have to do with endocrine problems. Not enough hormones could according to them cause men to have problem and consequently they enters a male menopause and in order to get back what they have lost men starts to take the hormone treatment testosterone. All things connect to each other, men age and start to suffer from menopause because of hormone disturbances and they then need testosterone as a hormone treatment to feel better again. This haven’t changed much over time, with the secondary sources I showed that doctors don’t know fully how to diagnose a male menopause and that when men age they start to suffer from some sort of hormonal deficiency and as I showed with the medicalization of the male menopause and testosterone the notion that testosterone can be a treatment form the male menopause have not gone away and is still used today. On the conclusion that not much have changed from the period 1920’s – 1960’s concurs with the secondary research.

One of the fundamental reasons why doctors thought that hormones could “cure” homosexuality was the fact that many thought including Arnold Josefsson and Erik Lundberg that men who were homosexuals suffered from having too much of the female hormone within them. Lundberg found that homosexuals excreted more of the hormone folliculin than

\textsuperscript{159} Westman (1963), 168.
“normal” men did. He found through his experiments that homosexual men excreted as much if not more folliculin as women did and in that way he showed that men had too much of the same hormones as women did. This is just one example of why doctors thought they could use hormones to find out who were homosexual and then “cure” them with male hormones. Lundberg’s experiments concurs with the secondary research that showed how doctors thought homosexual men suffered from too much female hormones and needed more male hormones to be “normal”. From the different cases that I have brought forth in my essay I think that I have contributed in showing how much of a complex problem the male menopause have been and still is. I also contribute in showing how different the conception of testosterone was in Sweden compared to the USA and how different the Swedish doctors and Paul de Kruif viewed testosterone. The main thing that I have contributed with is bringing forth the Swedish doctors ideas on the male menopause and testosterone but also how ideas about homosexuality was viewed in Sweden and how Swedish doctors also experimented on homosexuals. By connecting the Swedish doctors and Paul de Kruif with the medicalization of the male menopause I have also contributed in showing how their ideas and their work have contributed to the medicalization of this disorder.

I showed in chapter 3 that through medicalization of male menopause and erectile dysfunction there has emerged several products and ads for testosterone and aging that are produced for the modern man in today’s society but this wasn’t always the case. In the 1940’s and afterwards testosterone didn’t have a large market like female hormone products did. It was only after the medicalization of the male menopause that male hormone products became a lucrative business.

Synthetic testosterone was after it was first synthesized in 1935 expected to become a mass therapy for aging men but according to John Hoberman the pharmaceutical companies and their advertising could not enlist a critical mass of doctors to join their campaign. At first, after the synthesizing of testosterone, it was celebrated for what it could possibly cure in the future. Testosterone was hailed as one day being the treatment for premature sterility and feminine characteristics in men. During the 1930’s and 1940’s people and doctors still believed in the idea endocrinology brought with it, that hormone cures were possible to create and that hormone treatment could fix most problems.

Testosterone treatment and the advertisement of testosterone didn’t really catch on and one reason for this was that testosterone didn’t cure impotence which had been one of the main complaints associated with male menopause. Since testosterone couldn’t cure impotence the
other symptoms of male menopause which were the same as the symptoms of psychoneurosis started being treated with psychotropic drugs and this was another reason as to why the male hormone didn’t become successful. ¹⁶⁰ “Psychiatry replaced endocrinology as the explanatory framework, and tranquilizers replaced hormones as the preferred therapy.”¹⁶¹ This is clearly different from how Paavo Vara and Paul de Kruif viewed testosterone. They saw it as a treatment for aging and they thought it would help aging men to rejuvenate, Paul de Kruif especially believed this. Einar Rodhe and Arnold Josefson don’t mention testosterone since it hadn’t been synthesized when they wrote their articles and neither Folke Henschen nor Axel Westman mentions it either and the reason for that could be that they saw that the development of testosterone didn’t go as smoothly as doctors first thought it would. Perhaps he saw it as some other doctors did, that testosterone didn’t cure the main problem with male menopause – impotence and therefore wasn’t interested in it.

On the other side, Vara recommended testosterone as part of the treatment for the symptoms of the male menopause. However he was adamant that such treatment should be handled with care and not to misuse it because of possible health risks. He knew there were risks with this treatment but chose to use it anyway as long as it was used responsibly.

Paul de Kruif goes a step further and calls testosterone treatment the rescue of broken men and that testosterone is a builder of male bodies. According to him he got a new lease on life after participating in this hormone treatment. De Kruif talks about one case where the testosterone treatment has worked wonders. He describes the case of a twenty seven year old boy (he calls him boy because of his female symptoms) who led a miserable life because he had for many years suffered from migraine headaches, he experienced hot flashes like a middle-aged women, he also tired like an old man and he didn’t have much energy for physical exertion. He had hips that were wide like a women’s, he had protruding breasts like a girl’s, he had almost no Adam’s apple, his voice was high-pitched like a woman’s and he had almost no hair under his arms, chest and belly.¹⁶² His private parts were small, “his penis, which doctors measured, was one inch long and less than half an inch in diameter. He had no testicles that could be detected with certainty.”¹⁶³ This man felt vague discomforts and distresses and he was ashamed to live. According to de Kruif the doctors didn’t know what to do for him;

¹⁶⁰ Siegel Watkins (2008), 331.
¹⁶¹ Ibid., 331.
¹⁶² De Kruif (1945), 91ff.
¹⁶³ Ibid., 93.
His tragic condition was idiopathic, which was the medical impressive word for describing utter ignorance of what caused it. His sad boyishness and his physical feebleness were ‘of the nature of an idiopathy; self-originated; neither sympathetic nor traumatic.’ This learned description did not help him. His state appeared to be hereditary, and who could improve on an incompleteness wished upon him by God? The doctors admitted themselves powerless, but there was one member of the Albany Medical College faculty who was willing to take a real stab in the dark at helping him.\footnote{De Kruif (1945), 91.}

This man that helped him had a theory that he could chemically boost this unfortunate boy into manhood. Shots of testosterone were injected into the arm and his buttocks muscles three times a week. Apparently within sixty hours after his first injection he began to have erections, his penis became larger and after a month of testosterone injections this man who had been impotent for life was now able to carry on sexual intercourse. His thyroid gland grew larger and his hot flashes disappeared and his migraine headaches almost completely stopped. Hair also began to grow on his body and he was a happier man.

De Kruif’s tale about this man is very questionable and almost certain has to do with self-suggestion. Testosterone didn’t cure impotence and apparently this man who had been impotent all of his adult life suddenly through testosterone injections could have intercourse. De Kruif could also have been exaggerating the extent of his problems and since he was promoting testosterone he probably didn’t want to write anything negative about its effect as a curative treatment. He is all for testosterone treatments and he seems to truly believe in its healing and rejuvenating powers.

What is notable in his book is that he doesn’t think there could be anything wrong with injecting testosterone in the body. He saw no downsides only benefits and this was how he promoted testosterone, by only mentioning the positive. According to him it was the cure for male ailments and the thing to help men be and feel young for a longer period of time. There is a point in why he doesn’t write any negative about testosterone and that is because he declared that the male hormone was ready for the possible power to extend the prime of life of men. He foresaw a bright and profitable future for testosterone treatments and he thought that it would be a performance-enhancing drug for sexually unresponsive men. His predictions were wrong and the pharmaceutical companies failed to promote testosterone. The pharmaceutical companies failed to create a thriving market for testosterone.

I have already written about a few reasons why this failed and another one according to Hoberman was the sexual conservatism. What he meant was that because of the sexual conservatism the advertisement for androgens that appeared during the 1940’s focused mainly on treating the physiological and mental decline of aging men. There was no promoting of
sexual viability and improving couples sex lives and if there would have been maybe more men would have been interested in the treatment. Furthermore the taboo on sexuality constrained men with sexual problems to seek medical help. Older men with impotence seldom visited the doctor for help. Another contributing factor to the failure of testosterone was how the idea of a man was during that time. The dominant model of masculinity showed a clear difference between men and women. Male patients weren’t likely to believe that men also could suffer from what often seemed like a woman’s problem. It was much easier for male patients to accept that they suffered from a stress-induced condition than a male menopause. It also fitted better with the image of the man as a hardworking breadwinning male, especially among the middle-aged men.

As mentioned above testosterone wasn’t the success story that estrogen and other female sex hormone products were and as I have written the reasons were many, mainly that testosterone couldn’t cure impotence. Also there was the fact that the male menopause and testosterone treatment didn’t fit in with the idea of men and masculinity that existed in the 1940s. Men were also hesitant to even look for help when they were suffering because of the sexual restraints that existed within the society during this period. Men would rather suffer then to seek help because of the ideal that existed. Men didn’t seem to be ready to accept that they too possibly could be suffering from menopause just like women did. Since the sex roles were different and the idea was that men were supposed to be the stronger sex during that period, it didn’t sit well with them being less of a man and have women problems. Perhaps if the male menopause had been medicalized sooner and the discovery of Viagra had come during this time things would have been different and testosterone might have been a success story. There were men who put their faith and trust in testosterone like Paul de Kruif and he probably wouldn’t have been happy with the outcome of the testosterone saga.

Even if testosterone wasn’t successful during this time there were obviously people who still used it like de Kruif but perhaps if he and others had known the side-effects of testosterone treatment during this time he might not have promoted it as much as he did. Some of the symptoms and side-effects that could occur especially if testosterone is misused are chest pains, palpitations, anxiety, aggressiveness, depression, sleeping troubles, impaired sexual function and many other. The misuse of testosterone could also have endocrinological effects. If men with normal testes function use this hormone it could inhibit the excretion of

165 Hoberman (2005), 105.
167 Siegel Watkins (2008), 332.
important substances from the pituitary gland and this can cause blocking of the sperm production or advanced atrophy of the testicles. It could also cause liver damage, there is also an elevated risk for arteriosclerosis, enlarged heart, cardiomyopathy and high blood pressure.\(^\text{168}\) Perhaps the Swedish doctors with the exception of Vara knew that a treatment like testosterone treatment would not work because it was still a very unexplored subject and the side-effects were unknown. It could also be that with the medicalization of the male menopause and hormone treatment that testosterone isn’t viewed as being bad because doctors prescribe it and not all doctors think there is anything wrong with using testosterone, so why should regular people think it is wrong if the doctors doesn’t.

A thought that comes forth in this study is since homosexuality has been demedicalized and is no longer viewed as a medical disorder why haven’t the same thing happened to the male menopause. Aging has gone from being a natural life event in every person’s life to being a medical problem in need of treatment. It would be hard to demedicalize the male menopause and aging because in the current media there is always a process of development of new pharmaceuticals to give men. The engines of medicalization, biotechnology, the pharmaceutical industry/consumers and managed care, makes it very hard for a disorder like aging to not be medicalized. There are new technologies being developed all the time that develop new medications for the treatment of aging. The pharmaceutical and biotechnology industries are a driving factor as to why menopause for both men and women won’t be demedicalized. The consumers are also a part of the medicalization of menopause. As long as there is a market for the pharmaceutical companies to promote its wares the menopause will remain a medical disorder. The pharmaceutical companies can advertise directly to the public and in that way create markets for their products. They spend a lot of money on television advertisement and they can advertise directly to the people and they don’t have to go through doctors and advertise in medical journals only. Men have become more aware of their own bodies and if they see that there are treatments for their problems it is not unlikely that they will use the medicine that pharmaceutical companies advertise, which makes it difficult for menopause to ever be demedicalized.

After having written this essay I have thought about how this subject can develop and perhaps be explored in future studies. A question that has emerged during the work with the essay and a question for future research is how homosexuals themselves thought and felt

about the experiments that were happening on homosexuals during the 1920’s – 1960’s. An essay focusing on why doctors wanted and thought that homosexuals should be “cured” compared to how homosexuals and the public thought on the subject would be a very interesting essay to write in the future. Another aspect for future research is to study these Swedish medical researchers on a deeper level and go through archive material to get a broader picture of who they were and what they thought.
Summary

The purpose of this essay is to study and analyze how the history and the ideas of male menopause and testosterone are linked with the ideas about sexuality, morals and how the doctors view the male menopause and testosterone. It’s important to understand how the ideas about the male menopause and testosterone have changed from the 1920’s compared to present day.

The questions of this essay have been:

- According to medical researchers how have they explained the male menopause?
- How do the ideas about the male menopause, testosterone, hormones and aging connect to each other and have they changed during time? How are they expressed in the sources that I use?
- Why did doctors have the idea that homosexuals could be cured with testosterone and other hormones?

The theory that I have used in this essay is Peter Conrad’s medicalization. Conrad describe medicalization by saying that it’s a process in which nonmedical problems change and become defined and treated as medical problems, and this is usually done in terms of illness and disorders. Conrad has also noticed that during the last decades there has been an increase of ailments and disorders which have been diagnosed and subsequently become medicalized. Disorders like alcoholism, obesity, anorexia, impotence, menopause, Alzheimer’s, ADHD, depression, PMS and sleep disorders have been diagnosed and medicalized. Conrad says the most important thing with medicalization is how something becomes defined medically and the consequences it brings. Disorders can be medicalized but they can also be demedicalized, such as homosexuality and masturbation.

In chapter 1 I describe the history of the male menopause, when the concept occurred and how people perceived it. In the chapter I have shown how it throughout the ages has been some kind of desire to be younger and stronger, like the experiments that Charles Edouard Brown Séquard did. This chapter also explores how the ideas of rejuvenation have transformed to be perceived as a male menopause and it also contains a brief history of testosterone and how people thought it would change the man’s aging.

Chapter 2 is about the male menopause and I discuss it more in detail and what the effect testosterone may have had on ideas about the male menopause. In this chapter I present four different Swedish doctors and one Finnish doctor from the period 1920’s – 1960’s and their
views on the male menopause. I show what their ideas on the male menopause were and how they thought it was best treated. I also discuss how male menopause is a disorder that is difficult to diagnose and I also discuss the debate doctors have on whether the male menopause exists or not.

Chapter 3 turns the discussion to testosterone and what this phenomenon is all about. I explore one of the first men to promote testosterone in the 1940’s – Paul de Kruif. The chapter also contains the discussion doctors had when testosterone first came, if it was a miracle drug or not. I also describe the medicalization of the male menopause and testosterone.

Chapter 4 explores the relationship between testosterone and homosexuality. How the male hormone has been used to try and “cure” men of their homosexuality. Why did doctors think that testosterone and other hormones could change how a person was. In this chapter I also discuss one Swedish doctor Erik Lundberg and his experiment on homosexuals. I also discuss the medicalization and demedicalization of homosexuality

In the concluding analysis I discuss why the male menopause and testosterone didn’t have the same breakthrough as the female menopause and estrogen had on the market. I have also discussed how the Swedish doctors and Paul de Kruif thought about testosterone, if anyone had any warnings about it. I also discuss some of the risks and problems that testosterone and other androgen supplements could cause.
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