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Ernst Gr̄fenberg: From Berlin to New York

ABSTRACT

Dr. Gr̄fenberg was born 26 September 1881 in Adelebsen near Goettingen, Germany. He died in 1957 in the United States. He is best known for his work in the development of the intrauterine device (IUD) and for his studies of the role of the female urethra in orgasm. Dr. Gr̄fenberg published many scientific papers, which ranged from studies of the bones, muscles and nerves of the hand to his theory of the metastasis of cancer. The IUD he developed is known as the Gr̄fenberg ring. However, not until 1959, which was two years after his death, did his ring gain world-wide recognition as a method for family planning. His work with identifying the role of the urethra in female orgasm and the erotic zone that could be demonstrated on the anterior wall of the vagina along the course of the urethra, as well as his report of fluid that is expelled from the urethra that is different from urine, lead Perry and Whipple to name this sensitive area the Gr̄fenberg spot (G spot).

INTRODUCTION

I am honored to have been invited to be Dr. Ernst Gr̄fenberg's "living legend" and to describe his work. Dr. Gr̄fenberg was born 26 September 1881 in Adelebsen near Ḡttingen, Germany. He died in 1957 in the United States (Semm & Giese, 1983). Dr. Gr̄fenberg was an ingenious scientist and a great physician. He is best known for his work in the development of the intrauterine device (IUD) and for his studies of the role of the female urethra in orgasm. Little is published or really known of his personal life. I have spoken with his only known living relatives in the United States, distant cousins. They could shed very little on his life, except that they thought he was once married and had no children. I will now tell you what I know about Dr. Gr̄fenberg.

MEDICAL EXPERIENCE - KIEL AND BERLIN

Dr. Gr̄fenberg studied medicine in Ḡttingen and Munich. He obtained his doctorate on 10 March 1905, graduating "Summa cum laude." He began his work as a doctor in the department of ophthalmology at the University of W̄rzburg, Bavaria. He then moved to the obstetrical and gynecological department of the University of Kiel and began his specialization under Dr. R. Werth (Semm & Giese, 1983). During Dr. Gr̄fenberg's time in Kiel, he published at least 12 papers, which demonstrate that he was a scientific researcher of importance, not only because of his results but also because of his powers of observation and his cleverness in inventing new procedures (Gr̄fenberg, 1907, Gr̄fenberg, 1907b, Gr̄fenberg, 1908, Gr̄fenberg, 1908b, Gr̄fenberg, 1908c, Gr̄fenberg, 1908d, Gr̄fenberg, 1909, Gr̄fenberg, 1909b, Gr̄fenberg, 1909c, Gr̄fenberg, 1910, Gr̄fenberg, 1910b, Gr̄fenberg, 1910c) . At age 28 he published a paper entitled "A suprarenal cancer of the vulva as single metastasis of a malignant suprarenal cancer of the left side" (Gr̄fenberg, 1908d). This led the foundation for the "Gr̄fenberg theory," that metastasis can develop hematogenously by retrograde spread (Gr̄fenberg-Theorie, 1966). He then published work on the physiology of egg implantation (Gr̄fenberg, 1909c, Gr̄fenberg, 1910).





*Herrn Bly. Jannulowitz. Herr Tostle. Gräfenberg. Herr Wilhelm Robbers - all seated.
Herr Auguste Frankenstein. Frau Martha. R. WERTH. Heine. Herr Meier. Herr Christian.*

Ernst Gräfenberg (center, standing) as a junior doctor with the staff of the Department of Gynecology and Obstetrics of the University of Kiel.

After finishing his training in gynecology at the University of Kiel in 1910, he went to work as a gynecologist in Berlin-Schöneberg. He worked with Dr. J Thies, at the University of Berlin and began his scientific work on the physiology of reproduction, which resulted in 3 more papers (Gräfenberg, 1911, Gräfenberg, 1911b, Gräfenberg, 1912). It is reported that he developed the first ovulation test (Thiery, 2000). During the First World War he took an active part and served as a sanitation officer. Even while working on the battle front, he was often called to deliver babies of Russian women and even provided a pair of forceps, since none had been brought along with the supplies. During the war, he published seven papers on thoracic and abdominal gunshot wounds (Semm & Giese, 1983). After the war, he continued his scientific research in Berlin-Charlottenburg. In 1918 he published a 29-page paper on vaginal fluids (Gräfenberg, 1918). He was the first to describe the physiological connection between the stimulation of the growth of the follicle and of the endometrium and the cyclical variation of acidity of vaginal secretions. Seven additional publications followed concerning female physiology (Gräfenberg, 1922, Gräfenberg, 1924, Gräfenberg, 1929, Gräfenberg, 1931, Munter & Gräfenberg, 1925, Munter & Gräfenberg, 1927). Through his clinical activities, Dr. Gräfenberg became aware of the needs of poor (and not so poor) women, which may explain his lifelong interest in birth control and sexology (Thiery, 2000).

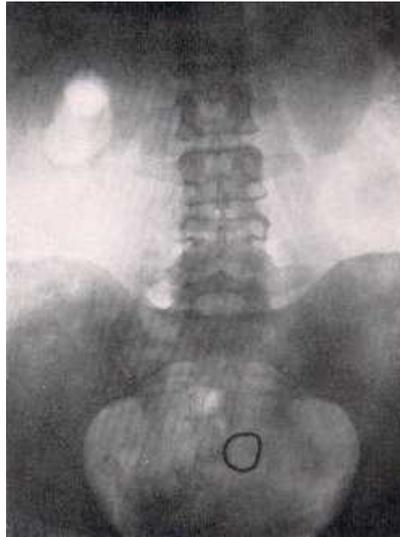
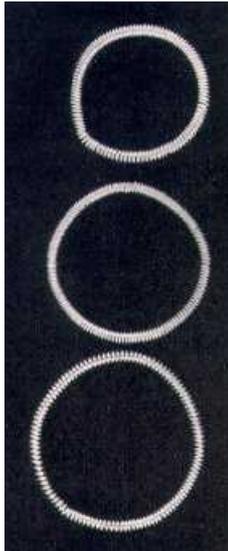
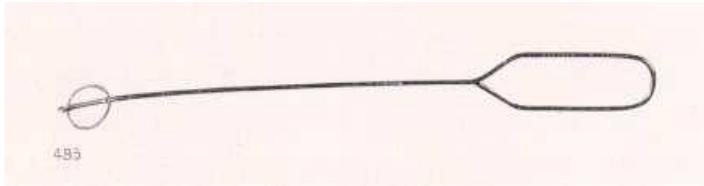


Ernst Gräfenberg as a young doctor

INTRAUTERINE DEVICE

After 10 years of research and the insertion of over 100 IUDs, Gräfenberg gave his first lecture on "Silk as a method of contraception" in Berlin in 1928. Gräfenberg began lecturing in London and Frankfurt on the method of intrauterine birth control that he developed, called the Gräfenberg ring (Semm & Giese, 1983). This ring was made of coiled silver wire. In a 1929 presentation in London concerning his Gräfenberg ring, Dr. Gräfenberg said "A satisfactory contraceptive method is most important in dealing with psychosexual disturbances in women" (Thiery, 2000, p. 1). He stressed the strict asepsis needed while inserting the IUD and the importance of regular checkups for this method of contraception (Semm & Giese, 1983). During the following years many leading gynecologists pointed out the difference between the Gräfenberg ring, which was situated in isolation in the uterus and the conventional intrauterine pessaries and others, which had a connection between the vagina and the uterine cavity. Biopsies of the endometria of women who had used the Gräfenberg ring inserted the previous year showed no signs of inflammatory changes in the endometrium. In fact, autopsies found the Gräfenberg ring in one woman worn for 24 years and in another worn for 58 years (Philipp & Luk, 1972). His ring did not cause injury or death as the conventional pessaries used during this

& Lun, 1972). This ring did not cause injury or deaths as the conventional pessaries used during this time did (Gesenius, 1935). This ring was used until the 1960s, when it was replaced by plastic IUDs. Recently, doctors have begun to prescribe the Gr̄fenberg ring again, because, unlike plastic IUDs, it does not have a thread, and so may be safer because infections can sometimes travel up the thread and into the uterus. However, because of the statistics of PID with other IUDs, Gr̄fenberg was denounced by virtually all leaders of German gynecology, who branded intrauterine contraception as a medically unacceptable method of birth control (Thiery, 2000).



**Top: Device for inserting the Gr̄fenberg-ring.
Left: Three samples of the ring.
Right: X-ray showing position of inserted ring**

SEXOLOGY

In 1928, Gr̄fenberg became a member of the executive committee of the International Society of Sexology (Semm & Giese, 1983). In 1933, as a result of political pressure, Gr̄fenberg, a Jewish physician, was forced to give up his position as head of the department of Gynecology and Obstetrics in Britz/Berlin (Semm & Giese, 1983). Ultimately, the advertising of contraceptives and/or giving contraceptive advice became illegal in Germany (Thiery, 2000). In 1934 Dr. Hans Lehfeldt (who was now in the United States) tried to persuade Gr̄fenberg to leave Germany. He decided to stay, believing he was relatively safe, since many of his patients were wives of high Nazi officials (Lehfeldt & Wheeler, 1994; Semm & Giese, 1983). He was wrong.

ESCAPE FROM GERMANY

In 1937 he was arrested for allegedly having smuggled a valuable stamp out of Germany. When influential friends of the International Society of Sexology discovered what had happened, the U.S. consulate began negotiations and deposited a large ransom for his release. It is reported that his release from prison was negotiated by Margaret Sanger of New York. In 1940 he was finally able to leave Germany and emigrate to California, traveling via Siberia and Japan (Lehfeldt & Wheeler, 1994; Semm & Giese, 1983).

UNITED STATES

It is reported that in Hollywood he found old friends and patients. He began working as a pathologist in Chicago while he prepared for the Medical Board Examinations. He passed the boards in 1941 at age 60. He then settled in New York City, where he developed a large private practice (Semm & Giese, 1983). He became affiliated with the Mount Sinai Medical Center (Thiery, 2000). During this time, in 1944, he published an important article with Robert Latou Dickinson called "Conception control by plastic cervix cap" (Gr̄fenberg & Dickinson, 1944) and in 1950 his seminal article "[The role of the urethra in female orgasm](#)" (Gr̄fenberg, 1950, [revised 1953](#)). It was the findings reported by Dr. Ernst Gr̄fenberg in this latter article that lead Dr. John Perry and me to name the sensitive area he described the Gr̄fenberg spot or G spot (Perry & Whipple, 1981).



Ernst Gr̄fenberg in his New York practice
(click on picture for enlargement)

GR̄FENBERG SPOT

I would like to tell you some of what Gr̄fenberg wrote, which is what influenced us to honor him in the way we did. Gr̄fenberg wrote: "Although female orgasm has been discussed for many centuries or even thousands of years, the problems of female satisfaction are not yet solved.....The solution of the problem would be better furthered, if the sexologists know exactly what they are talking about. The criteria for sexual satisfaction have first to be fixed..." (Gr̄fenberg, 1950, p. 145). He then went on to say, "Innumerable erotogenic spots are distributed all over the body, from where sexual satisfaction can be elicited; there are so many that we can almost say that there is no part of the female body which does not give sexual response, the partner has only to find the erotogenic zones" (Gr̄fenberg, 1950, p. 145). In speaking about vaginal sensitivity, Gr̄fenberg reported that: "An erotic zone always could be demonstrated on the anterior wall of the vaginal along the course of the urethra" (Gr̄fenberg, 1950, p. 146).. He then said, "even when there was a good response in the entire vagina, this particular area was more easily stimulated by the finger than the other areas of the vagina. Women tested this way always knew when the finger slipped from the urethra by the impairment of their sexual stimulation. During orgasm this area is pressed downwards against the finger like a small cystocele protruding into the vaginal canal....It could be found in all women, far more frequently than the spastic contractions of the levator muscles of the pelvic floor, which are described as objective symptoms of the female orgasm by Levine" (Gr̄fenberg, 1950, p. 146). Our findings replicated these findings of Gr̄fenberg (Perry & Whipple, 1981; Ladas, Whipple, & Perry, 1982). Gr̄fenberg (1950) also reported that "Analogous to the male urethra, the female urethra also seems to be surrounded by erectile tissue.... In the course of sexual stimulation, the female urethra begins to enlarge and can be felt easily...the most stimulating part is located at the posterior urethra, where it arises from the neck of the bladder" (p. 146). This is the area that Perry and Whipple (1981, 1982) named the Gr̄fenberg spot.

FEMALE EJACULATION

Concerning what Perry and Whipple (1981) called female ejaculation, Gr̄fenberg wrote: "If there is an opportunity to observe the orgasm of such women, one can see that large quantities of a clear transparent fluid are expelled not from the vulva, but out of the urethra in gushes. At first I thought that the bladder sphincter had become defective by the intensity of the orgasm. Involuntary expulsion of urine is reported in sex literature. In the cases observed by us [he does not state who us was], the fluid was examined and it had no urinary character. I am inclined to believe that "urine" reported to be expelled during female orgasm is not urine, but only secretions of the intraurethral glands correlated with the erotogenic zone along the urethra in the anterior vaginal wall. Moreover, the profuse secretions coming out with the orgasm have no lubricating significance, otherwise they would be produced at the beginning of intercourse and not at the peak of orgasm" (Gr̄fenberg, 1950, p. 147). Many research studies have supported Gr̄fenberg's findings. Perry and I published our findings in 1981 (Perry & Whipple, 1981) and about 30 studies have been conducted since (Whipple & Komisaruk, 1991; 1999; Zaviacia & Whipple, 1993). Milan Zaviacic from Slovakia has just published a book on this topic "The Human Female Prostate" (Zaviacic, 1999).

LATER LIFE

In 1953 Dr. Gr̄fenberg was found to be suffering from Parkinson's disease and he was forced to give up his private practice. He then devoted his creativity to the Margaret Sanger Research Bureau in New York. He also became acquainted with Alfred Kinsey and his Institute for Sex Research (Semm & Giese, 1983). Hans Leffeldt and Connie Christine Wheeler (1994) report that Gr̄fenberg's own sex history was among those included in the Kinsey Report. Dr. Gr̄fenberg died quietly on 28 October 1957 in New York City. It is surprising that there was no notice about his death in scientific papers or in the newspapers. One German weekly described him as a medical benefactor, who was marked by the modesty of a truly great man (Semm & Giese, 1983). This highly gifted man, who published a total of 45 papers that I am aware of, did not live to see his work recognized world-wide. In 1959 his Gr̄fenberg ring was recognized by Oppenheimer (1959) and Ishihama (1959) and in 1981 we named the sensitive area felt through the anterior vaginal wall after this great man. He has now gained the recognition he deserves.

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