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## ARE G-SPOT, A-SPOT, AND C-SPOT PROMISING OR DOWNGRADING

VERMA V<sup>1\*</sup>, KUMAR A<sup>1</sup>, DHAMA N<sup>1</sup>, PAUL P<sup>2</sup>, AND ARORA K<sup>2</sup>

1: Department of Pharmaceutical chemistry, Kharvel Subharti College of Pharmacy Swami Vivekanand Subharti University Meerut, 250005, India

2: Department of Pharmaceutics, Kharvel Subharti College of Pharmacy Swami Vivekanand Subharti University Meerut, 250005, India

**\*Corresponding Author: Dr. Vikrant Verma: E Mail: [vijeetsingh84@rediffmail.com](mailto:vijeetsingh84@rediffmail.com)**

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### ABSTRACT

The G-spot is a purportedly highly erogenous area located on the anterior wall of the human vagina. Some females have been reported experiencing mammoth pleasure after the stimulation of this spot. However, others have reported frustration from their incapability to locate it, or from the trust that they do not have a G-spot. The concept of the G-spot initially appeared in a prevalent book on human sexuality in the year 1982, the reality of the G-spot has become extensively accepted, particularly by the universal community. Consequently, the subject G-spot has now become a core topic of popular assumption and becomes the basis of surrounding a huge amount of business on it. This article reviews the G-spot, A-spot, and C-spot concerning producing orgasm. There is a huge hype that consideration of these spots is useful in reaching orgasm or not. Orgasm can also be achieved if these spots are not taken into consideration. This article also deals with the evidence of G-spot evidence.

**Keywords: Vagina, G-spot, genital, ejaculation, orgasms**

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## INTRODUCTION

The sexuality of a female is multifaceted and several factors influenced it which is interrelated to hormonal, physiologic, social, cultural, partner, and psychological matters. In males, the vital organ is the penis, whereas in women the clitoris, vagina, uterus, and the Grafenberg-spot (G-spot), are vital and have not a definite existence [1]. G-spot also called the Grafenberg spot or Grafenberg area, found inside the vagina is an erogenous zone. The part of the body near the opening of the vagina which is sensitive to sexual stimulation is called an erogenous zone. Stimulation of this spot leads to great levels of orgasms and arousal of sex [2].

G-spot is ambiguous because it is a minute anatomical structure and not a spot found within the anterior distal wall of the vagina. The term “an erogenous zone,” was introduced by De Graaf in 1668 and is also used by Grafenberg in 1950. The phrase was changed from “erogenous zone” to “the Grafenberg zone” by Addiego *et al.* in 1981 and later modified by Perry and Whipple in 1981 to “The Grafenberg spot” which was further modified to “G-spot” by Ladas *et al.* in 1982. This was an abbreviated form used in a nonacademic book for the first time and later gained media attention around the world. It also reveals that engorgement of the

anterior-distal vaginal wall results owing to entrapment of blood in the G-spot and this not by any means associated with erectile tissue [3].

The controversial and current issue is the G-spot which attracts attention in the sexuality of females for the reason that it encompasses a market segment in genital esthetics with involvements for instance its augmentation. First-person to define the G-spot as an erogenous zone was Ernst Grafenberg who describe its presence below the urethra on the vagina anterior wall, approximately half a centimeter in size, nevertheless the original reports of its existence date far earlier. This area is generally pressed downwards throughout orgasm comparable to a small cystocele bulging into the canal of the vagina. After thirty years the name of G-spot exists after Addiego’s case report on ejaculation in females. When a 1.5-2 cm area surrounding was touched beside the long axis of the urethra, preliminary it leads to a urination feeling, and when this area is stimulated further, it leads to sexual terms, this stimulation leads to enlargement of the area at a degree of 50%. About the same subject, anatomists, gynecologists, and sexual experts published self-reported questionnaire studies, case studies, anatomic

and histologic studies, and imaging studies. Whether it is really anatomically present or a scientific deception still awaits an answer and publications are contradictory. In this study, it was asked in detail whether the participant felt a coin-size sensitive area in the anterior vaginal wall at the time of finger or penis penetration or pressure; namely the G-spot. A study was executed to examine its potential influence on observation of female genitalia and sexual function and also to examine exactly how many women are the possessor of this zone [4].

Addiego *et al* introduced the term in the year 1981 to give recognition to Dr. Ernest Grafenberg who, they believed to be the foremost to suggest the existence of such an area in a 1950 paper. In 1982 with the publication of the prevalent book on human sexuality “The G Spot and Other Recent Discoveries About Human Sexuality” G-spot evolved into public cognizance. G-spot reality is widely accepted by modern working women as suggested by survey study.

In the Canada and United State to evaluate the response to G-spot a 192-item questionnaire based on sexuality was sent by mail to “an indiscriminate sample of about 2350 proficient women working in health care departments. Out of which 55% were

responded and 1289 questionnaires were not responded. Out of total sample response, 84% replied that they “understood that in the vagina a highly sensitive area exists. Utmost widespread books were written on sexuality affirms that the G-spot existence is real.”

As it is proved that the acceptance of the reality of the G-spot is acknowledged widely one would assume to find substantial evidence of research confirming the presence of such a structure. There is evidence that justifies the reality of the G-spot which are female ejaculation claims, evidence of behavioral approach, and anatomical approach [5].

#### **Evidence of behavioral approach**

Perry, Ladas, and Whipple reported sketch of orgasms of the powerful nature of women which was evolved after stimulation of their G-spot. To justify this two published studies give an idea about the exact stimulation of this known area. During the first study, a woman was examined for deeper orgasms subsequent to stimulation of their G-spot. The wall of the vagina nearly grows to about 50% subsequent to stimuli digitally through one session with the subject of the anterior vaginal wall.

Goldberg *et al* examined 11 women, simultaneously to examine the fluid nature ejaculated after orgasm and also to determine

the existence of G-spot. Two gynecologists after examining each subject give an idea of the presence of G-spots. Equally both of them a training session of 3-hour was given on how to check for G-spot presence. The training included "a special type of biomechanical test as well as a sexual psychology test where they accelerated the entire vagina in a circular motion." With the help of this technique, they came to realize that 4 out of 11 women have G-spots [6-8].

### **Ejaculation in female**

Ejaculation in females is another source of evidence for the existence of a G-spot in this a nonurine fluid evolves during orgasm. The correlation between G-spot and female ejaculation was nonanatomic and tenuous originally but Griffinberg noted the possibility of such ejaculation.

### **Anatomic approach**

A more of an anatomic approach has been taken by other researchers to the concern of components such as the prostate in female ejaculation. If the ejaculates of a woman fluid encompass non-urinary constituents or it is not urine it might possibly be coming from somewhere other than the bladder part. After Bennett and Severly, Tapper et al proposed that any amount of female ejaculation which is non-urinary would be expected to come from the paraurethral glands of female, also

acknowledged as Skene's ducts or glands. These glands on anatomical grounds were thought to be similar to the male prostate by Huffman, who also provided a detailed anatomical description and note on the history of anatomical thoughts about the nature of these glands. If these glands are aligned with the male prostate, it can be expected that their secretion will be similar to that of the prostate. This was the assumption that Tapper et al experimented with.

### **Evidence of Anecdotal origin**

Anecdotal evidence concerning the G-Spot was first put forward by Ernst Grafenberg in 1930 which was supported later by Goldberg et al after 30 years. After the evaluation of 11 women with the aid of a manual technique which is standardized Goldberg's and his team identify the G-spot in 4 women. Initially, Ernst Grafenberg highlighted the area approximately in the mid of the cervix and pelvic bone and in close proximity to urethra and bladder in the front wall of the vagina was mainly sensitive to mechanical stimulation. His finding came to the conclusion that G-Spot has anecdotal evidence. The observations of Grafenberg's was also supported by Zvi Hoch through his book named "The Arm of the Female Orgasmic Reflex," "He came to the conclusion by his research that the vaginal

wall anterior part is more sensitive than the clitoris. Addiego was the next to conclude by his research that stimulation of the G-spot was the main reason concerning the orgasm and sexual arousal. Further evidence in support of G-spot existence was obtained with the aid of a questionnaire, in one examination the attitude of the women concerning the G-spot was evaluated by mailing sample in a random manner to 2,350 women in which the response of 55% was identified, majority of women in this survey came to realize the existence of area in the vagina which is highly sensitive.

Later it was observed that along with the anterior wall of the vagina, the posterior wall was also established to be erogenous by Alzate in 1985, he observed that if the posterior wall is stimulated manually it leads to orgasmic response. This was further evaluated in a study of 27 volunteers who were paid for undergoing digital stimulation systematically of both of the vaginal walls, after evaluation it came to realize that both anterior and posterior wall of the vagina was established to have erotic sensitivity. Levin further repeated that different anatomic sites embodying the anterior and posterior wall of the vagina and clitoris. After analyzing all these literature it came to realize that the anecdotal examination is difficult to prove

the G-spot existence in a discrete manner [9-11].

The anatomical structures mainly established after exhaustive studies on G-spot are periurethral tissue and Skene's glands. During sexual excitation, Skene's glands become active leading to ejaculation. The closeness of the anatomical position of Skene's glands with the G-Spot gives an idea that Skene's glands represent the anatomical structure of the G-spot. The correlation between G-spot and ejaculation in females is ambiguous [10-12].

Skene's glands secretions are drained in the urethra with the help of long ducts that are equivalent to the prostate. The prostate glands of male which are prepubescent are akin to these glands as far as the immunohistochemical aspect is considered which is examined by Wernert, which is also identified by the examination of the fluid emitted during the course of orgasm [13, 14]. After the survey of 1230 qualified women in the healthcare department aged between 22 to 82 in Canada and the United States, it came to realize that ejaculators are more sexually responsive in relation to non-ejaculators and 82% reported the existence of G-Spot along with experience of ejaculation during the orgasm. This survey mainly focused on questions relating to ejaculation

in females and factors associated with it embodying orgasm and G-Spot [15-17].

In another survey conducted by Winton came to the conclusion of the existence of the G-Spot by the vast majority of women, the relationship between orgasm and ejaculation, and its sensation associated with stimulation. Few researchers were of the opinion that in the vagina anterior wall there exists an arrangement of ducts and glands known as G-Spot which is responsible for orgasm and sexual response in the stimulatory phase. Subjects who reported orgasm also observed squirt of fluid during the orgasm [13, 14].

It is observed that on one side Skene's glands are interconnected with G-spot and ejaculation in females and on the other side a feeble correlation is seen between G-spot and secretory glands on the argument that Skene's glands are not stimulated by touch, owing to absence of touch receptors. Although there is an establishment of ultrasonic evidence for the Skene's glands in its relation to secretion of fluid during arousal of sex, this phenomenon may also be likely to occur owing to the rich supply of blood in the genital area [15].

### **G-spot exact location**

After the insertion of fingers mainly one or two inside the vagina with holding palm up the exact location of the G-spot can be

identified which approximately lies 5-8cm near the opening of the vagina anterior wall. Urethral sponge, a tissue in the neighboring urethra starts swelling utilizing "come here" gesture. Then after sensing the swelling the women start feeling to urinate initially which changes to an enjoyable feeling a few seconds later. Such type of experience may be painful for few women when the stimulation is extended [18].

### **G-spot dysfunction and treatment**

Several criteria for the diagnosis of dysfunction of G-spot was Ostrzenski in 2018 which embodies past surgery of anterior-distal wall of the vagina, incompetence to reach vaginal orgasm, previous history of hurtful vaginal delivery, weakened engorgement of the anterior wall of the vagina, reduced sensation of the anterior-distal wall of vagina during the course of sexual stimulation and utilization of unproductive preceding conventional medical treatment.

G-spotplasty is a novel surgical method adopted for efficient treatment for dysfunction of G-spot

G-spot vascular component consists of a large interwoven vein-like vasculature structure, with few distorted vessels having empty lumens which resemble arteriovenous malformations and some are thrombosed

having less significant feeding arteries surrounding along with the neighboring adipose tissue. G-spot does not have any distinguishable erectile or glandular tissue in its structure. Previously it was believed that ballooning of the anterior vaginal wall is governed by erectile tissue present on the G-spot which was later ruled out as ballooning of the vagina was due to the entrapment of blood in it.

### **Diameter and location of G-spot**

Urethrovaginal space ultrasonographic measurement thickness discloses the diameter and location of the structure of the G-spot. The urethrovaginal space of the female contains Skene's urethral ducts and glands [3].

### **Role of media in unfolding G-Spot**

G-Spot consideration has makes us develop a view of more than one way of getting the sexual response and hence it removes the pinpoint focus on only clitoris. There is a big task for the scientists for the establishment of the scientific existence of G-spot on one side and on the other side, there is a huge craze in the mind of the general public for unfolding its existence. The search of it is increasing to clearly identify and differentiate its role as compared to the clitoris which is densely innervated. Due to this, there is a change in opinion in the minds of the common

community regarding female sexual behavior. Additional knowledge concerning sexual behavior is required by the general public because they are desperate for the information concerning enjoyment and performance required to improving sex. Media is the main means which disseminate knowledge concerning G-spot. The willingness to explore the G-spot is of great interest as compare to whether the G-spot exists or not.

The desire to get insight into the mystery of G-spot leads to the evolution of the business which embodies a generation of videos, books, and all type of products with assists to achieve heightened orgasm by the different sex partners and women by an in-depth understanding of G-spot and there is a lot of expectations of the general public concerning the G-spot which automatically generates lots of business to the tune of multimillion-dollar in the industry. There is also a problem associated with the adoration of G-Spot in the persons belonging to the medical field which leads to G-spot augmentation in which the submucosa of the vagina is injected with collagen which is human-engineered to stimulate the vagina wall with penile thrusts leading to heightened stimulation of sex. These type of procedures can only be considered for investigation because the

scientific investigation is not done on it and are only widespread [19-22].

It was believed since the last century that the vagina has nothing to do with the excitement of sex it was only a reproductive organ because the wall of the vagina has low sensory receptors density and is less sensitive to the stimulation and nerve ending supply is lacking in it. It was due to the efforts of Ernst Grafenberg in the initial 1950s the vagina's importance mainly of the anterior wall was identified in the origin of orgasm and sexual enjoyment. Ernst Grafenberg was the first to unfold the vagina's highly sensitive area. Even the Indian primitive books on Jayamangala and Kamasutra support this analogy of heightened sexual enjoyment as a result of stimulation of sensitive parts of the anterior wall of the vagina [19, 23].

### **Nonexistence of G-spot**

Even the nonexistence of G-spot is proved by Dr. Vincenzo Puppo in 2006 utilizing his papers published. In his papers, he claimed that G-spot was not discovered by Grafenberg in 1950 and it was acknowledged by his name. The name G-Spot was coined by Whipple and Drs. Perry only to commemorate the associated research of Dr. Grafenberg in 1950 which also not mentioned G-spot through his name. The G-Spot nonexistence is further proved by Dr.

Vincenzo Puppo who claims that evidence provided by Barry Komisaruk, Helen O'Connell, Irwin Goldstein, Frank Addiego, Beverly Whipple, Emmanuele Jannini and Odile Bussion are not scientifically based [24, 25].

### **Scientific data published concerning the nonexistence of G-spot**

The topic of G-spot is of huge controversy because even Grafenberg described the urethra role and not the vagina role in the orgasm of females in his article published in 1950. It is also a matter of huge debate even among the medical and technical groups and among women themselves because it involves investigations that are doubtful and too much emphasis given to anecdotal evidence [26].

Despite huge criticism on the issue of G-Spot Burri *et al.* in 2010 wrote that women have accepted extensively the G-spot presence even the biochemical, anatomical, and behavioral examination failure which was postulated for the support of its existence [27, 28].

### **Amplification of G-spot**

A technique of cosmetic surgery temporarily utilized for the enhancement of sensitivity and size of G-Spot. Through this technique septum of the bladder-vaginal is inoculated with material akin to collagen or dermal filler

is termed as G-Shot or G-spot augmentation or amplification. Amplification is executed mainly to increase sexual pleasure through enhancing the sensation during intercourse utilizing the wall of the vagina being rubbed by the penis. It is a surgical technique of insignificant invasion of the wall of the anterior vagina by the injection or insertion of external material [29, 30].

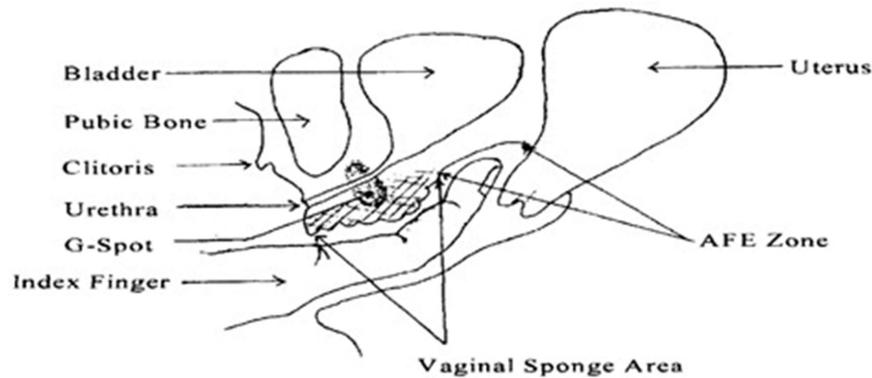
There is still a huge controversy regarding this procedure's usefulness or its uselessness. This technique is also not recognized by the US Food and Drug Administration. Lack of response to the stimulation of G-Spot leads to several women for searching a solution that embodies the amplification of G-Spot without the knowledge of merits and demerits of this procedure [23, 24, 31].

### **A spot**

In 1997 Dr. Chua Chee Ann gave the term A spot a probable area of sexual stimulation in the female which is also called as AFE zone. It is in close proximity to the G spot nearer to the cervix and is a highly sensitive portion of the wall of the anterior vagina. This area cannot be sensitive to stimulation for all women, a little training is required to get the feeling of erotic sensitization. Lubrication of the vagina is achieved after stimulating AFE

Zone, found in the vagina anterior wall which further results in orgasm as the build-up eroticism has to be released [31, 32].

The stimulation of the AFE Zone should be previous to the stimulation of the sponge area of the vagina to give rise to lubrication and stable vasocongestion. If any of the other vaginal parts are stimulated or the above-mentioned situation is reversed then from the sponge area of the vagina a stable reflex response is failed. It was only utilizing feeble stimulation of vaginal wall anterior half, also known as AFE Zone leads to lubrication and vasocongestion of wall of vaginas anterior spongy area which is established by means of trial and error in 1989. Sponge area of the vaginal wall behaves as a lubrication sponge and is inevitable for the lubrication process. After the mild stimulation of the AFE Zone, the erotic character of it was noted. Its neurophysiological role has not been proven. As it is not supplied with enormous nerves it serves as the point of acupuncture and is also identified as a distinct erogenous spot in the primitive Indian literature present in the middle of the vagina. The stimulation of the A-Spot is represented in figure 1 in which the entire finger is introduced in the client's vagina). (**Figure 1**).



**Figure 1: Sponge area of the vagina, AFE Zone Position, and the right position in which the finger inside the vagina can be evaluated [33]**

A-spot can also be stimulated by women herself, by inserting into the vagina index finger in a laydown position in which both the legs stretched down the knees. The Finger pulp area is generally used for the stimulation of the A-spot. This procedure can be stopped after the lubrication process is achieved or the female has reached the zenith of orgasm. It is recommended to remove nails during the stimulation of A-Spot as it can cause injury to delicate tissues of the vagina.

Women require the wall of the vagina to be sensitive to erogenous stimuli for the enjoyment of intercourse and the tone of the muscle of the vagina should be sensibly good because it plays an important part in orgasm. To enjoy the drives of the penis to a great extent, to increase the orgasm the erogenous sensitivity of the wall of the vagina is

essential. Pain associated with intercourse and dryness of the vagina can be treated with the aid of the technique of stimulation of AFE Zone, which is an ‘instant cure’. The women in which AFE Zones sensitivity is high experience a faster lubrication rate as compare to sensitive to a very low extent or non-sensitive AFE Zones. Stimulation of A spot can lead to substantial and quick enhancements in sexual activity. Stimulation of the AFE Zone leads to treatment of improper orgasm and vasocongestion and has the prospective to become a novel technique of sex treatment. Even sexual activity can be improved with the aid of A-spot stimulation. A-spot has a prospective to become a novel erogenous area that has been examined by Chua. As a result of stimulation of this area, numerous orgasm is seen as compared to single orgasm by women’s, most of women’s

take time for sensitization while few are sensitized rapidly [31, 33-36].

### C-spot

It is also known as the clitoris and hence can be named interchangeably. It consists of an area having the shape of a wishbone that passes the sides of the opening of the vagina. The clitoris may be called C-spot in an interesting manner. The clitoris most sensitive part is the C-spot mainly responsible for the orgasm and its associated pleasure. The C-spot is assessed by the feeling of a “little bump” at the right of the clitoral complex. C-spot is stimulated with the aid of a hand in which fingertip is utilized for direct stimulation. Pleasure air technology can also be utilized as a technique for the stimulation in which increasing intensity pulse is applied. There are different sex positions through which C-spot can be namely missionary, spooning, and cowgirl but of paramount importance is manual stimulation [37].

Masturbation is the other means to reach orgasm which is achieved by gentle massage of the area of the clitoris or C-spot. C-spot should be considered rather than the G-spot for the attainment of orgasm. The orgasms of the C-spot are more particular as total orgasm enjoyment and has a fewer concern about the

cervix. C-spot orgasms occur in very deep waves and affect the full body [38].

### CONCLUSION

Several pieces of evidence claim the existence and nonexistence of G-spot which leads to orgasm in females. Without the consideration of G-spot orgasm can be attained, few females find it difficult to find the G-spot even though orgasm can be achieved in them. As far as A-spot is concerned it is located nearer to the G-spot is another erogenous center for which a little training is required to stimulate it for orgasm. C-spot can also lead to orgasm after its stimulation. There are few problems in considering these spots as few women are unable to find them leading to frustration, even the orgasm can be achieved without consideration of these spots. As enjoyment of sex is necessary for the physical and mental health so if these spots are not considered women can also attain orgasm. These spots will remain in controversy as the years to come and consideration of these spots can only disturb the sex life.

### REFERENCES

- [1] Emhardt E, Siegel J, Hoffman L. Anatomic variation and orgasm: Could variations in anatomy explain differences in orgasmic success? [Internet]. Clin. Anat. 2016; 29(5):

- 665–72.
- [2] Courtois F, Alexander M, McLain ABJ. Women’s sexual health and reproductive function after SCI. *Top Spinal Cord Inj Rehabil* 2017;
- [3] Ostrzenski A. G-Spot Anatomy and its Clinical Significance: A Systematic Review. *Clin Anat* 2019; 32(8): 1094–101.
- [4] Kaya AE, Çalışkan E. Women self-reported G-spot existence and relation with sexual function and genital perception. *Turk Jinekoloji ve Obstet Dern Derg* 2018; 15(3): 182–7.
- [5] Aydın S, Sönmez FC, Karasu AFG, Gül B, Arıoğlu Ç. Search for the G spot: microvessel and nerve mapping of the paraurethral anterior vaginal wall. *Int Urogynecol J*. 2020.
- [6] Seu A. Clitoral, and: G-Spot. *Pleiades Lit Context* 2020.
- [7] Ostrzenski A. The G-Spot Anatomical Structure Spotted. *J. Sex. Med.* 2018.
- [8] Lindhardt T, Berthelsen CB. h-index or G-spot: Female nursing researchers’ conditions for an academic career. *J. Adv. Nurs.* 2017.
- [9] R. T. Cosmetic vaginal surgery: Hype or good clinical practice? *Aust New Zeal J Obstet Gynaecol* 2019.
- [10] Robinson D, Cardozo L. The G-spot. In: *Female Genital Plastic and Cosmetic Surgery*. 2016.
- [11] Yeung J, Pauls RN. Anatomy of the Vulva and the Female Sexual Response. *Obstet. Gynecol. Clin. North Am.* 2016.
- [12] Belbachir S, Houmiri A, Ouanas A. Woman sexuality moroccans woman knowledge. *Int J Adv Res.* 2021;
- [13] Szell N, Komisaruk BR, Goldstein SW, Campbell TG, Goldstein I. 236 Review of the Evidence of the Female Prostate as a Functional, Sexually-Relevant Gland in Some Women. *J Sex Med*; 14(2): 101–2.
- [14] Pastor Z, Chmel R. Differential diagnostics of female “sexual” fluids: a narrative review. *Int Urogynecology*, 2017; 29(5): 621–9.
- [15] Flamini MA, Barbeito CG, Díaz AO, Portiansky EL. Comparison of the structural and ultrastructural characteristics of the female prostate between pregnant and non-pregnant plains viscacha (*Lagostomus maximus*). *Tissue Cell* 2021; 68: 101458.

- [16] Szell N, Komisaruk B, Campbell T, Goldstein S, Goldstein I. FRI-14 Review Of The Evidence Of The Female Prostate As A Functional, Sexually-Relevant Gland In Women. *J Urol*. 2017; 197(4S).
- [17] Hayssen V, Orr TJ. Introduction to “Reproduction: The Female Perspective from an Integrative and Comparative Framework.” *Integr Comp Biol* 2020; 60(3): 676–82. Available from: <https://academic.oup.com/icb/article/60/3/676/5870288>
- [18] Chalmers J. Health Check: does the “G-spot” exist? . *Conversat*.2016
- [19] Aydın S, Sönmez FC, Karasu AFG, Gül B, Arıoğlu Ç. Search for the G spot: microvessel and nerve mapping of the paraurethral anterior vaginal wall. *Int Urogynecology J*. 2020; 31(12): 2565–72.
- [20] Sisti A, Sisti G, Nisi G. Female genital and vaginal plastic surgery: An overview. *Plast Reconstr Surg*, 2020, 872E-873E.
- [21] Peach C. ‘Ghetto-Lite’ or Missing the G-Spot? A Reply to Johnston, Poulsen and Forrest. 2010; 36(9): 1519–26.
- [22] Kilchevsky A, Vardi Y, Lowenstein L, Gruenwald I. Is the Female G-Spot Truly a Distinct Anatomic Entity? *J Sex Med* 2012; 9(3): 719–26.
- [23] Sivaslıoğlu AA, Köseoğlu S, Elibol FD, Dere Y, Keçe AC, Çalışkan E. Searching for radiologic and histologic evidence on live vaginal tissue: Does the G-spot exist? *Turkish J Obstet Gynecol*,2021; 18(1): 1.
- [24] Hoag N, Keast JR, O’Connell HE. The “G-Spot” Is Not a Structure Evident on Macroscopic Anatomic Dissection of the Vaginal Wall. *J Sex Med* 2017; 14(12): 1524–32.
- [25] Tomov N, Dimitrov ND, Sivrev DP. the female g-spot: anatomical fact or fantasy? 2017 .
- [26] Kaya AE, Çalışkan E. Women self-reported G-spot existence and relation with sexual function and genital perception. *Turkish J Obstet Gynecol*, 2018; 15(3): 182.
- [27] Bischof-Campbell A, Hilpert P, Burri A, Bischof K. Body Movement Is Associated With Orgasm During Vaginal Intercourse in Women.; 56(3): 356–66.
- [28] Rodriguez FD, Camacho A, Bordes SJ, Gardner B, Levin RJ, Tubbs RS.

- Female ejaculation: An update on anatomy, history, and controversies. *Clin Anat* 2021; 34(1): 103–7.
- [29] Yegin GF, Kilic G, Secen EI, Bahadir IB, Tas EE, Keskin HL, et al. Clinical and ethical perspectives of medical professionals towards female genital cosmetic procedures. *Turkish J Obstet Gynecol.* 2021; 18(2): 131–9.
- [30] Ostrzenski A. G-Spot Anatomy and its Clinical Significance: A Systematic Review. *Clin Anat*, 2019; 32(8): 1094–101.
- [31] Ostrzenski A. G-Spotplasty: A New Surgical Plastic Intervention The Preliminary Study. *Aesthetic Plast Surg*, 2018; 42(4): 1126–32.
- [32] Sayin U. Sayin HÜ, Schenck CH Desire-Pleasure-Orgasm . *SexuS Journal* 4 (11): 907-946.
- [33] Herbenick D, Fu T-C (Jane), Arter J, Sanders SA, Dodge B. Women’s Experiences With Genital Touching, Sexual Pleasure, and Orgasm: Results From a U.S. Probability Sample of Women Ages 18 to 94. 2017; 44(2): 201–12.
- [34] Sayin U. Article 1005 Citation: Sayin HU. Five Cases with Expanded Sexual Response (ESR). *Ann Clin Case Stud* .2019; 1(1): 1005.
- [35] Sayin HÜ. Cronicon EC Neurology Review Article Neurological Correlates and the Mechanisms of Expanded Pleasures in Women: Novel Findings on ESR. 2019 .
- [36] IsHak WW, Clevenger S, Pechnick RN, Parisi T. Sex and Natural Sexual Enhancement: Sexual Techniques, Aphrodisiac Foods, and Nutraceuticals. *Textb Clin Sex Med*, 2017; 413–32.
- [37] Haley S. How to Find Your G-Spot, and C-Spot, and A-Spot [Internet]. *glamour*, 2020
- [38] Engle G. Cervical Orgasm - How to Have a Cervical Orgasm [Internet]. *marieclaire*, 2017.