

Treatment of vaginismus by hypnotic psychotherapy. Review

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Abstract: *Aim:* To evaluate the level of knowledge of vaginismus in its psychological and sexual causes, the use of medical hypnosis as a therapeutic support, and to create an ad hoc hypnotic model for its treatment through a grid comprising all dimensions used in the various researches considered in the literature. *Methods:* The review was performed by consulting the electronic Medline database (PubMed), DSM IV-TR and 5, Benini's biopsychosocial relational theories, and extracts abstracts data from various medical and sexology publications. *Results:* The vaginismic woman seems to present a psychobiological vulnerability, mainly triggered by hyperactivity of the emotional sphere and by a muscular hypertonus of the pelvic floor that influences the sexual sphere. The data support the idea of a general defensive reaction as a mechanism of involuntary muscular activity of the pelvic floor and a close connection between vaginismus, pelvic contraction, emotional motor system and biological anguishes of the reptilian mind. *Conclusions:* Further to the effectiveness of a multidisciplinary-approach in the treatment of vaginismus, hypnosis seems to have an impact in shortening therapy time, in pain management and anxiety reduction. According to Benini's approach, the cause of vaginismus is not identified in the fear of penetration but rather in the anguish of the reptilian mind.

Keywords: Hypnosis; Vaginismus; Psychotherapy; Sexual pain disorders; Emotional pelvic floor system

INTRODUCTION

Vaginismus affects the fertile female population in the percentage of 0.5-1%¹, and as many as 15-17%² of the population is treated for coital pain. This literature review is aimed to explore the psychological and sexual aspects of vaginismus, in order to build a protocol of functional and effective therapeutic interventions using hypnosis, an extremely flexible method for all health care providers.

METHODS AND MODELS OF STUDY FOR VAGINISMUS

The Medline database (PubMed) has been used searching the following keywords: "vaginismus", "hypnosis and vaginismus", "pain and vaginismus", "hypnosis and pain" "emotional motor system", "hypnosis and safe place", "innervation of the pelvic organs", taking into account Engel's biopsychosocial model³, the definition and the criteria according to the DSM (Diagnostic and Statistical Manual of Mental Disorders), MacLean's Triune Brain model⁴, and Benini's biopsychosocial relational psychology⁵.

Engel's biopsychosocial model. It is a person-centred model, developed by Engel in 1977 based on the multidimensional conception of health submitted in 1947 by the WHO (World Health Organization)⁶. The model proposes to define health as a state of complete physical, mental and social well-being and not merely the absence of disease³. In this model all people are included in a network of biological, psychological and social relationships that influence health both in themselves and by interacting with each other. The importance of the genetic and biological factor is closely correlated with the psychological factor that takes into account the mental, emotional and spiritual dimension (dimensions that impact on the health) and with the social factor that includes systems such as family, community, culture, socio-economic status and the possibility of access to health care.

MacLean's Triune Brain. Paul MacLean formulated the theory of the "Triune Brain"⁴, a brain made of three levels developed in the course of human evolution and presenting different characteristics. Reptilian or Primal Brain, the oldest, Paleomammalian or Limbic Brain, and Neomammalian, the most recent and advanced. The reptilian brain, which developed first, is positioned on the brainstem and includes the rachid bulb and the midbrain. Although human beings developed the subsequent brains during the period

of their evolution, the former brain was not lost. Therefore, according to the tripartite division, the human being has three different mental levels, each one with its own characteristics. According to MacLean, the human mind has a *cellular memory* based on the memory of all the information received during its existence, stored and organized in order to interact with the internal and external world and to reach a state of adaptation. In a nutshell, the mind is composed of a biological cellular memory (*biological mind*), a psychological cellular memory (*psychological mind*), and a social cellular memory (*social mind*). Considering that the first task of the human being is to adapt to the environment (both physical, rational and social), the stored information is fundamental for the adaptation. The lack of adequate information therefore becomes the subsequent cause of anxieties and fears.

Benini's reptilian brain and biological mind. According to Benini theory, the *biological mind* deals with the primary survival needs as nutrition, hydration, sleep, thermoregulation, body care, disease care, movement, relaxation, play, sexuality, territory. Through its function each individual is able to satisfy the self-preservative needs that can be classified in terms of physical security (care and maintenance of the body) and environmental safety needs (search for safe environments). When a person perceives a danger that may jeopardize the integrity of her body, health or surrounding environment and at the same time is not able to adequately respond to the needs of self-preservation, some sentinels better defined as biological anguishes activate⁵. Their task is merely informative, to communicate to the person that the methods currently implemented are not effective and must be modified to restore a biological balance.

The anguishes of the biological mind. Biological anguishes can be considered guardians of survival. They activate to signal that the integrity and health of the body are at risk, and that the surrounding environment threatens to compromise the safety of the individual. These threats arise when the human being does not respond correctly to the demands of self-preservation, or when he is temporarily unable to do it because insurmountable obstacles arise between him and his needs for self-preservation. The *biological anguishes of fragmentation* activate when the body is in danger as in the case of environmental disasters, serious illnesses and accidents, malnutrition, violence, torture and poor care, or in all situations in which the individual is not able to satisfy the

physical security needs. Fragmentation anguish succeeds in triggering ancestral and violent defenses which strongly reactivate the animalistic part present in every human being, a part accustomed to the struggle for survival. The reemergence of the “animal part” allows the individual to endure hunger, cold and pain for longer. Strength and aggression increase to such an extent that he overcomes situations previously unthinkable and terrifying. In some cases, the activation of fragmentation anguish manages to save the human being, in others it can do nothing, in others it remains active even in absence of danger. In this last case, the anguish loses its adaptive meaning and turns from guardian into an aggressor leading the individual to perceive it as an enemy from which he must defend himself⁷. The biological anguishes of persecution activate when an individual perceives in his own living environment the presence of a danger that could damage his physical safety or that of the family, that is to say in all situations in which the human being is not able to meet his own security needs.

PAIN (Physical and psychological)

According to IASP's (International Association for the Study of Pain) “pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or otherwise described as such”⁸. According to Bunker⁹ pain is “whatever the experiencing person says it is, existing whenever he says it”. Pain has different dimension; it can be manifested with anxiety, mood disorders, depression, feelings of loneliness, incompleteness and inability to control the situation. The emotional consequences produced by pain can lead to the outcome of feelings such as: fear that pain can become uncontrollable, fear of dying, fear of losing mental or physical self-control, fear of losing one's social role, fear of losing one's autonomy. Fears, moods, feelings and the character of the person have the ability to influence, increasing or decreasing, the perception of pain. The brain areas that respond when we experience *physical* pain are the same areas that are also activated in case of *psychological*¹⁰ pain. In particular, the areas involved are the anterior cingulate cortex and the anterior insula. Besedowsky¹¹ demonstrated that stress plays a significant role in the production of cortisol, a hormone able to suppress the response of the immune system. Pert¹² discovered the neuropeptides, molecules responsible for the transmission of information between the cells of the nervous system, the blood, the immune system and the intestine. The biological regulation systems interact, exchange information through neuropeptides one another, and are profoundly influenced by psychological states. Negative emotions produce a negative chemical change in the body¹³.

EMOTIONAL MOTOR SYSTEM AND PELVIC FLOOR

The voluntary motor system does not have direct control of the pelvic organs, but rather, only some control of the striated muscles of the pelvic floor. The pelvic floor motoneurons are located in the nucleus of Onuf, which innervate all parts of the pelvic floor, including the external urethral sphincter and the external anal sphincter. Interestingly, the motor cortex cannot contract these muscles separately, but only as a unit. Furthermore, the motor cortex cannot continuously keep contracting the pelvic floor muscles, which means that a strong uncontrolled urge for micturition or defecation cannot be stopped for a long time, leading to urge-incontinence. The real control of the pelvic organs is through the emotional motor system. The emotional motor system also controls basic motor activities such as blood pressure, heart rate, respiration, and vocalization. An important role is played by the sympathetic and parasympathetic systems, the so-called

autonomic motor systems as they cannot be controlled voluntarily by the emotional motor system. Fortunately, the sympathetic and parasympathetic motor systems are under very strong control of the emotional motor system in the brainstem and prefrontal cortex. The *sympathetic* system is especially activated when the individual has to immediately defend its existence (i.e. by fighting an aggressor or by flying from a dangerous situation [fight or flight]) or, reversely, when it has to catch animals to obtain food to survive). In contrast, the *parasympathetic* system is active in safe situations, when energy can be spent on motor activities such as eating, drinking, and digesting food. Also, the activities of the pelvic organs, such as micturition, defecation, and sexual activities, can take place only when the situation is safe. The individual eats food and digests it by activation of the stomach, duodenum, jejunum, ileum, and colon. The distal colon and *rectum* in the pelvis get rid of, as well as an important bacterial component, also the food that could not be digested. All these organs are activated by the parasympathetic system. The bladder is the pelvic organ that takes care of the urine produced by the kidneys. However, the *bladder* cannot empty itself from urine when the individual is in danger and the sympathetic system is active. In this context, the sympathetic fibers inhibit bladder contractions. The parasympathetic fibers also control the pelvic organs involved in *sexual behaviour* and the resulting pregnancy in women. The sacral parasympathetic motoneurons that innervate all the pelvic organs are specifically controlled by the so called Pelvic Organ Stimulating Center (POSC). The POSC in turn is controlled by the periaqueductal gray (PAG) located in the mesencephalon (midbrain) the primary control center for descending pain modulation which receives, to be activated, instructions from higher brain levels such as the amygdala, bed nucleus of the stria terminalis, and various regions of the hypothalamus. The PAG also receives information regarding the situation of the individual from more rostral brain regions of which, in humans, the most important is the medial orbitofrontal cortex where it is decided whether the PAG can activate the POSC to start micturition, or defecation, or parturition or increase vaginal vasocongestion and lubrication. A possible reduction of PAG-POSC system activity causes absence of vaginal vasocongestion and lubrication¹⁴.

VAGINISMUS

Definitions: «recurrent or persistent involuntary contraction of the perineal muscles surrounding the outer third of the vagina at attempt of penetration»¹⁵, «whether or not associated with a variable degree of phobia of penetration»¹⁶, «persistent or recurrent difficulty for the woman to accept vaginal penetration of the penis, a finger or an object, despite the woman's expressed desire to do it. There is often phobic avoidance and an anticipatory fear of pain. Anatomical abnormalities or other physical abnormalities must be excluded or treated»¹⁷. The vaginismus, from a psychoanalytic point of view, is symptom of conversion. Unresolved psychosexual conflicts are often seen as cause of the reaction: “women fear falling into the power of the man, being injured or exploded within by him. Under these circumstances, the vagina becomes in phantasy of biting organ which is going to render harmless the menacing penis”^{18,19}. The physical *causes* of primary vaginismus, present from the beginning of the sexual life, are to be considered extremely rare. The main factor of “mechanical” obstacle to penetration can be connected to a particularly fibrous and rigid hymen (or cribose or narrow) which fails to distend²⁰. Other physical factors can be specific syndromes such as: Müllerian vaginal agenesis, typical of Rokitansky's syndrome, or acciden-

tal or provoked scarring in genital traumas with particular reference to infibulations associated with clitoridectomy²¹. Studies and electromyographic assessment of the levator muscle show how vaginismus can be a myogenic component that occurs with marked hypertonicity of the muscle itself with inversion of command¹⁷. Physical causes more frequently cause a spasm of the levator muscle that makes the coitus painful or impossible, a spasm that appears after a period of more or less normal relations, resulting in a secondary vaginismus, especially if there is also an acquired attitude of avoiding penetration²².

Diagnostic criteria DSM (Diagnostic and Statistical Manual of Mental Disorders). Vaginismus and dyspareunia, often strictly associated but difficult to distinguish, have been incorporated into a single entry named *genito-pelvic pain/penetration disorder (GPPPD)*. The proposal to join them into a sole disorder arose from the real difficulty to differentiate these two disorders clinically. The DSM IV-TR¹⁵ proposes a differential diagnosis between “Sexual dysfunction due to a general medical condition (dyspareunia due to physiological effects such as: insufficient vaginal lubrication, pelvic pathology due to vaginal or urinary infections, endometriosis, adhesions or vaginal scar tissue, vaginal atrophy post-menopause, fall in estrogen during breastfeeding, urinary tract irritation or infections, gastrointestinal disorders) and “Substance-induced sexual dysfunction” (dyspareunia caused, for example, by the use of fluphenazine, thioridazine and amoxapine). If dyspareunia is concomitant with one of the described dysfunctions and intrapsychic combined with interpersonal factors, a diagnosis of “Dyspareunia due to Combined Factors” will be proposed, if there are no dysfunctions due to general or substance-induced medical conditions, an evaluation of “dyspareunia due to psychological factors”¹⁵ will be suggested. As opposed to the previous edition, the DSM-5²³ sexual dysfunction are no more included in the same category but in three distinct ones: *gender dysphoria, paraphilic disorders, sexual dysfunctions*.

DSM 5. Criteria. A) Lack or significant reduction in sexual desire/arousal due to at least three of the following problems: persistently or recurrently deficient (or absent) sexual/erotic fantasies and desire for sexual activity, reduced or no initiation of sexual activity, no response to partner's attempts, absent or reduced sexual excitement or pleasure during most sexual activity, absent sexual interest or arousal in response to sexual stimulation, absent or reduced genital or nonessential sensations during sexual activity.

B) Symptoms with six months requirement. The temporal characteristics must be evaluated, whether the disorder occurs at the beginning of the sexual-life (primary) or if it has appeared later, after a period of normal sexual function (secondary or acquired).

C) The problem causes clinically significant distress or impediments.

D) Sexual dysfunction is not better justified by another axis I* disorder. It is not due solely to the direct physiological effects of a substance or a general medical condition. In order to make a good diagnosis it is important to point out the contextual characteristics: the disorder could be of a generalized type, that is present in every situation even with possible different partners, or situational when it is limited to a partner or specific situations²⁴. It is also important to assess the degree of stress (“distress”) that arises as a result of the disorder²⁵.

**In the DSM-IV Axis I provides information about the following clinical disorders: anxiety, mood, somatoform, eating, psychotropic substance-related, dissociative, psy-*

chotic, sexual and gender identity (desire or arousal disorder, absent or early orgasm, dyspareunia, vaginismus, paraphilias like fetishism, pedophilia, masochism, sadism, voyeurism, exhibitionism).

STUDY RESULTS

The literature review shows the efficacy of a *multidisciplinary model* in the treatment of vaginismus. The *biopsychosocial model* (BPS) is the basic structure for understanding whether a person is healthy or in illness; nevertheless this model has limitations: 1) cannot be considered scientific; 2) in the field of biological psychiatry, mental disorders derive from faulty biology; 3) the approach of “physicians” considers that the levels of biological, psychological and social analysis are or epiphenomena or can be completely reduced to the body. In fact, Ghaemi claims that the doctor who embraces the BPS model takes the serious risk of losing the limits of his knowledge and skills²⁶. Biopsychosocial relational psychology assumes that mental illnesses reside in the ability of the three minds to communicate one another⁴. Critics believe that, assuming every mental disorder with a biopsychosocial model, there is the risk of increasing the gap between biology and psychology as if they were two separate fields in medicine. If a physical damage is considered exclusively from the biopsychosocial point of view, the treatment could be confused or have serious consequences. Some mental disorders can be explained by the biopsychosocial relational model but it is erroneously assumed that the model is applicable to any disease²⁶. We can conclude that the biopsychosocial approach is very useful for health and health care in some situations. Pennebaker²⁷ stated that the perception of physical sensations is not based solely on peripheral receptor information. Situational signals seem to influence perception. Psychophysiological studies on sexual arousal in women have shown changes in the visibility of body sensations between and within subjects²⁸. Van der Velde declares “we investigated the relationship between involuntary pelvic floor muscle activity during exposure to emotional film excerpts. We found an increase in pelvic floor muscle activity during threatening and sexually-threatening film excerpts²⁹”. From the neurobiological point of view, co-morbidity appears with various phobias and anxiety disorders³⁰. At this point the vaginismic woman seems to present a neurobiological vulnerability, mainly triggered by the hyperactivity of the fundamental command emotion of anxiety/fear³¹, which influences the sexual area with a specific psychosomatic penetration phobia³¹. This vulnerability could be reinforced due to other phobias (agoraphobia, acrophobia, claustrophobia, etc.)²⁰. The data support the idea of a general defensive reaction as a mechanism of involuntary muscular activity of the pelvic floor³². The biopsychosocial relational model is a clear mean for comprehending the functioning of minds, which is easy to understand and use. According to this model the area which is activated in vaginismus is the reptilian brain, so we can no longer speak of anxiety as a signal of unread emotion or conflicting emotions, but of a signal of real danger which activates biological or primordial defenses. From the reading and the application of Benini's model, it is clear that the symptoms present in vaginismus can be phobic but the causes are deeper, stemming from the biological anguish. The term *anguish* should be used instead of the term *anxiety* when dealing with sexual dysfunctions, and technicians treating sexual dysfunctions should be aware they are not dealing with anxiety or phobia, but with an anguish of the reptilian mind. The *genito-pelvic pain/penetration disorder* is linked above all to Interest Disorder/Sexual Arousal³³. It is to be underlined

Negative educational models and examples, ancient traumas (physical, emotional or sexual) ³⁵
Significant relationships; cultural or religious frustrations ³⁶
Over attachment to the mother figure, fear of defloration, fear of childbirth ³¹
Current interpersonal difficulties, sexual dysfunction of the partner, inadequate stimulation and / or unsatisfactory emotional and sexual context ³⁷
List of all diseases including psychiatric disorders, side effects from taking drugs, substance abuse ³⁴
Desire and arousal disorders or genital arousal and dyspareunia ³⁸
Gynecological conditions: hormonal alterations, recurrent vaginitis, prolapse, endometriosis, natural or iatrogenic menopause ³⁴
Urological conditions such as recurrent cystitis, overactive bladder or urge, stress or mixed incontinence ²¹
Diseases such as multiple sclerosis or pudendal nerve neuralgia ²¹
Myalgia of the levator muscle and any manifestations of hypotone or hypertonus of the same ²¹
Dysmetabolic disorders, among the main diabetes and cardiovascular symptoms ³⁹
Proctological disorders, constipation ³⁴

Table 1. Information and experiences to be collected in the history for the patient suffering from vaginismus. List of backgrounds checks for the construction of a survey tool.

that an accurate collection of the sexological history of the individual should be an integral part of the consultation, paying maximum attention to predisposing, precipitating and maintenance factors, both biological, psychosexual and relational, as they are factors that can certainly be an active and triggering cause of the disorder brought into gynecological (vulvar and vulvodynamic vestibulitis) and proctological (obstructive constipation, hemorrhoids, anal fissure) consultations³⁴. The patient suffering from vaginismus must increasingly find acceptance on the part of doctors, pelvic floor rehabilitation technicians, psychotherapists and sexologists who, working with a team approach, can assess the vaginismus taking into account all aspects of the person's life, as suggested by Engel's biopsychosocial model. The patient should receive a diagnosis and a proper specialist referral. The more the patient is informed of all the factors involved in her own sexual disorders, the higher possibility of a reduction in treatment time, visible improvement of feelings of self-efficacy and decreasing of chronic illness risk, which leads to possible increase in comorbidity.

THE EFFICACY OF HYPNOSIS IN THE MEDICAL FIELD

Hypnotherapy has by now received numerous awards in the scientific field, in application disciplines, in the medical, psychiatric and psychotherapeutic fields. Studies on frequency analysis using EEG suggest a correlation between hypnotic susceptibility and theta frequency band and by the Yapko's school is highlighted that the brain of the subjects in hypnosis responds positively to the suggested experiences rather than to those actually perceived; biologically, the effects of hypnosis have been confirmed by modern imaging techniques and have shown changes in the activity of some regions of the subject's brain when suggestions in hypnosis

are given⁴⁰.

Hypnosis has been found effective in many conditions: general and social anxiety³⁹, general phobias³⁹, anxiety and dental phobia in odontostomatology^{39,41}, post-traumatic stress disorders³⁹, depression⁴², sleep disorders⁴³, eating disorders⁴⁴, obesity⁴⁵, anorexia⁴⁶, bulimia⁴⁷, sexual dysfunctions⁴⁸, acute and chronic pain⁴⁹, using the potentiality of the hypnotic analgesia³⁹, such as in the treatment of the fibromyalgia³⁹, rheumatoid arthritis⁵⁰, severe burn and childbirth pain^{51,52}, muscle tension headache³⁹, migraine⁵³, cancer pain and chemotherapy-induced nausea/vomiting⁵⁴, surgical and gastroenterological, dermatological invasive procedures^{39,55}, irritable bowel syndrome⁵⁶, psoriasis and alopecia areata⁵⁷, hypertension³⁹.

Hypnosis and pain. Hypnosis seems to have a good therapeutic impact in reducing therapy length and treating individual cases: the analgesic or antinociceptive effect of hypnosis is such as to reduce pain by at least 50%³⁹. In a test with ischemic pain, researchers reported that highly hypnotizable subjects had an increase in pain tolerance of 113% versus a 26% increase in tolerance in poorly hypnotizable subjects³⁹ in reducing anxiety⁵⁸ and de-enhancing muscle rigidity. The study of the emotional motor system highlights the fundamental correlation between motor expression and psychological assumptions.

Hypnosis in female sexual dysfunctions. Hypnosis can help those suffering from sexual disorders either by accompanying the subject towards a greater awareness of the causes of dysfunction, or by providing a resolving therapeutic intervention. This, in fact, allows to face with the complex multifactorial system at the base of the disorder that often includes relational, physiological factors, false beliefs as well as any previous traumatic experiences^{39,59,60}.

The efficacy of hypnosis in vaginismus. Hypnotherapy provides an acceptable time and cost effective therapeutic tool that helps resolve vaginismus and improves sexual satisfaction in both spouses; although both behavior therapy and hypnotherapy were successful in treating vaginismus, hypnotherapy performed better than behavior therapy in reducing the level of the wife's sex-related anxiety. In Pukal's⁶⁰ research 8 women suffering from vulvodinia were subjected to six hypnotherapy sessions through which different parameters have been investigated: pain reported during gynecological examinations, vestibular pain threshold and assessments about pain during sexual activity. The results reported a pain reduction during gynecological examinations and sexual activity resulting in increased satisfaction and improved sexual life in general. Meissner⁶¹ reports the holistic approach of the Chinese Medicine and Hypnotherapy leading to a substantial pain reduction in patients affected by endometriosis, as well as an increased birth rate in patients refractory to conventional therapies. Fear and anxiety are of tremendous importance in the production and maintenance of a symptom. Vaginismus, as a reaction of avoidance of an anxiety-producing situation, is readily amenable to treatment by systematic desensitization. Fuchs⁶² presented a study on the treatment of vaginismus by hypnotic desensitization with a case-controlled group: good results achieved in 16 out of 18 patients, no relapse or substitutions of symptoms occurred at 2 to 5 years follow-up. Overall, studies show that hypnosis can be a promising treatment for sexual disorders, as shown by data on patients with vulvodinia⁶³.

CONCLUSIONS

Despite the well documented beneficial aspects and methodological quality of many studies, the limited data on female dysfunctions, in particular concerning vaginismus as

the only variable, require further research on psychological interventions in relation to this disorder, using randomized and controlled designs and larger samples. The need arises to evaluate the *couple*, in addition to the social and relational aspects of the patient, as there is often an *inducer of the symptom*. As many as 32% of women's partners with vaginismus have sexual dysfunctions, such as desire disorder, premature ejaculation, erection disorders⁶⁴. Studies on the use of hypnosis in vaginismus confirm its strong ability to reduce anxiety, reduce pain and relax muscles. An *intervention protocol* is needed that starts from an accurate *investigation* of the biopsychosocial dimensions, questionnaires and tests that measure the perception of physical and psychological pain only in this dysfunction, differentiating it from dyspareunia; and of a hypnotic *training* that deals step by step with the dimensions that characterize vaginismus. Furthermore, there is the need for a thorough study on the patients' ability to connect the body and emotional states restoring the dialogue between body and mind, a capacity present in each person evaluating how people can experience their emotions instead of using defenses such as rumination, avoidance or emotional freezing, and how hypnosis therapy can foster communication between the deep mind and the emotional motor system, and consequently manage painful states and muscle rigidity.

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Multidisciplinary UroGyneProcto Editorial Comment

To improve the integration among the three segments of the pelvic floor, some of the articles published in *Pelviperrineology* are commented on by **Urologists, Gynecologists, Proctologists/Colo Rectal Surgeons or other Specialists**, with their critical opinion and a teaching purpose. Differences, similarities and possible relationships and possible relationships and what is known in the three fields of competence are stressed, or the absence of any analogy is indicated. The discussion is not a peer review, it concerns concepts, ideas, theories, not the methodology of the presentation.

Behavioural med... The validity of the concept of “vaginismus” has been extensively questioned. The DSM has struggled to respond to criticisms challenging its validity as right from its inception, vaginismus has been a descriptive term that lacked any scientific evidence. The DSM’s spasm oriented diagnostic criteria and its listing of vaginismus together with dyspareunia as two separate pain disorders has confounded many researchers and clinicians. Studies utilizing surface electromyography have consistently failed to differentiate between normal controls and vaginismic women on the basis of muscle tension or spasm, thereby questioning the validity of DSM’s classification system. What

has been of interest is that the majority of “vaginismus” cases meet the diagnostic criteria of vulvodynia, a recognized form of chronic vulvar pain, under the classification of the International Society for the Study of Vulvovaginal Disease (ISSVD). When theory and conjecture is set aside, hypnosis as a form of relaxation may aid in reducing the severity of penetration related pain, but this is yet to be demonstrated.

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Urol... The close correlation between emotional motor system and pelvic floor is well known. In this context, vaginismus is the result of a skeletal muscular hyperactivity that is activated for pain relief. From a urological point of view, pelvic pain may cause not only vaginismus but also dysuria due to a failure to relax the external urethral sphincter, for the same reasons for which vaginismus is determined. In other words, very often vaginismus is not an isolated symptom but it may be also associated with dysuria and in some cases also with anal hypertonus. In these cases the hypnosis could determine a positive effect

for the improvement of the vaginismus due to a reduction of the skeletal muscular hyperactivity of the pelvic floor with a consequent improvement of micturition, This condition in urology is more evident in *women* and is defined by some as *urethral syndrome*. In *males* the urethral syndrome is often confused with *prostate* hypertrophy or chronic infection.

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Gyn... In obstetrics, the “vaginismic women “ have high rate of labor dystocia and perineal morbidity. Interesting, in women with sexual disorders there is an abnormal activation of Pelvic Organ Stimulating Center (POSC) that trigger the obstetric labor starting from pelvic floor modifications, by parasympathetic innervation. Indeed, to contain the fetal body during vaginal delivery, the pelvic floor muscles must stretch and slide each other in their three different layers of deepness (levator ani, deep trasversus and superficial trasversus perinei). In “vaginismic women” with such alteration of neuronal transmission, this process

can be more difficult. The proven efficacy of hypnotherapy also in labor delivery, as in vaginismus can confirm the common origin of these muscular “dystocias “. It is interesting the couple approach with hypnotherapy in vaginismus, since it is not surprising that as many as 32% of vaginismic women’s partners have sexual dysfunction, the author says.

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Proctol... Trying to cure a functional hypertonus of the internal and external sphincters (in the absence of painful lesions such as anal fissure), considering it as responsible of obstructed defecation, may produce iatrogenic damages. A basal pressures of 100 mmHg or more is high but it does not mean constipation, while the lack of sphincter inhibitory reflex in megarectum is a real internal sphincter problem. A non relaxing or paradoxically contracting external sphincter at straining in analogy with *vaginismus* has been initially defined *anismus*, or *inverted command* or sphinc-

ter *dyssynergia*. These conditions, the causes of which are not known, often suggest possible connections between viscera and emotions, and are cured by rehabilitation, in this way improving the difficult defecation if present. It is interesting to note that hypertonicity and dyssynergia are also highlighted in the so-called anodyspareunia in anal coitus in males and females.

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