FEMALE ORGASMIC DYSFUNCTION AND GYNECOLOGICAL PATHOLOGIES

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ABSTRACT

Background: Despite available data on the influence of gynecological pathologies on sexual dysfunction, there is no clear scientific evidence on the influence of sexual disorders, such as anorgasmy, on the development of gynecological pathologies.

Objective: The objective of the study was to examine the relationship. The Objective of the study was the detection of the relationship between women's sexual functions (orgasm and libido) and gynecological pathologies.

Methods: Six hundred seventy-six sexually active women (aged 18-55 years; mean age, 31.7 ± 3 years) were investigated.. They were divided into three groups: I gr. – 148 women OVVC, II gr. – 125 women with DMV and III gr. – 403 women with other gynecological pathologies. In all groups, the frequency of orgasms and the level of libido were assessed through interviews.

Results: In I group rate of women with anorgasmy (70,9%) and rare orgasms (20,9%) was significantly higher (P<0.01) than rate women, who had orgasms often (6,1%) or always (2,0%). In II group rate of women with anorgasmy (39,2%) and rare orgasms (44,0%) was significantly higher (P<0.01) than women, who had orgasms often (12,8%) or always (4,0%). In III group generally was observed prevalence of women without absolute absence or presence of orgasms. As of relationship between intensity of sexual drive (libido) and frequency of orgasms – in all groups there was direct dependence - women with anorgasmy and rare frequency of orgasms mainly had low or medium libido and in women, who had orgasms often or always libido was mainly medium or high.

Conclusions: Orgasmic dysfunctions (anorgasmy) can promote a congestive process in the pelvis, development of varicosis of ovarian and pelvic veins (with corresponding other gynecological complications), which themselves can determine chronic pelvic pain that deepens the anorgasmic process.

In younger ages and early stages of the beginning of sexual life, timely management of anorgasmy might be a good prevention for further development of gynecological pathologies.
The issue needs further investigation to reveal the cause-and-effect relationship.

Keywords: anorgasmy; ovarico-varicocele; dilatation of myometrium veins; gynecological pathologies

Introuction

Good sexual and reproductive health is a state of complete physical, mental, and social well-being in all matters relating to the reproductive system.[1]

Orgasmic dysfunction in women is one of the most important sexual disorders that determines a decrease in the quality of life in women as well as couples.

Frequency of female anorgasmy according to country data is very different:[2-5] USA – 26%, Australia – 29%, Turkey – 43%, Iran – 37%, Nigeria – 55%, Brazil – 21%, China – 31%.

Dr. Elisabeth A. Lloyd summarized 32 studies conducted over 70+ years, on the frequency of women's orgasms with intercourse – intercourse alone, not orgasm with additional direct clitoral stimulation-anorgasmy-5-10%.[6]

There is a vast database on causes of sexual dysfunctions in women, indicating the most frequent factors such as anatomic, hormonal, vascular, neurological, psycho-emotional, situational, relationship problems, chronic diseases, pharmaceuticals, aging, etc.

Well investigated is also the role of gynecological pathologies and pain related to them in the development of sexual disorders.

According to Fugl-Meyer KS & Fugl-Meyer AR,[7] a lot of women, who report manifested sexual genital pain, also report: low level of sexual interest (67%), insufficient vaginal lubrication (61%), manifested orgasmic dysfunction (48%), vaginismus (9%).

Several studies indicate the direct influence of endometriosis on the development of sexual dysfunctions in women.[8-10] Stenyaeva N and co-authors in their study of women with endometriosis revealed that in the structure of sexual dysfunctions, deep dyspareunia (87.1%), decreased libido (83.3%), and coital anorgasmia (80.6%) prevailed, accompanied by disruption in sexual adaptation in the pair (93.5%). All patients demonstrated depression and anxiety. Based on literature data, it's possible to conclude that endometriosis leads to a significant disruption of the sexual health of women and marital relations and correspondingly reduced quality of life for both partners.[8-10]

Despite access to data on the influence of gynecological pathologies on the development of sexual dysfunctions, we couldn't find scientifically proven evidence on the influence of sexual disorders, such as anorgasmy, on the development of gynecological pathologies. Only in a few articles, dedicated to varicose extension of pelvic veins (VEPV), dyspareunia, and anorgasmy, are these conditions indicated as risk factors for the development of VEPV.[11,12]

For us, the logical chain was under question mark: in the sexual response cycle, during the excitement and plateau phases, the blood supply of pelvic organs increases, and orgasm is the retraction mechanism for shedding blood back from these organs during the resolution phase. In cases of anorgasmic coitus, blood accumulates in the pelvic organs for an extended period, leading to venous stasis and, consequently, pelvic congestion syndrome. This condition can contribute to the development of an ovarian varicocele and the dilatation of the myometrial veins (Figures 1 and 2).

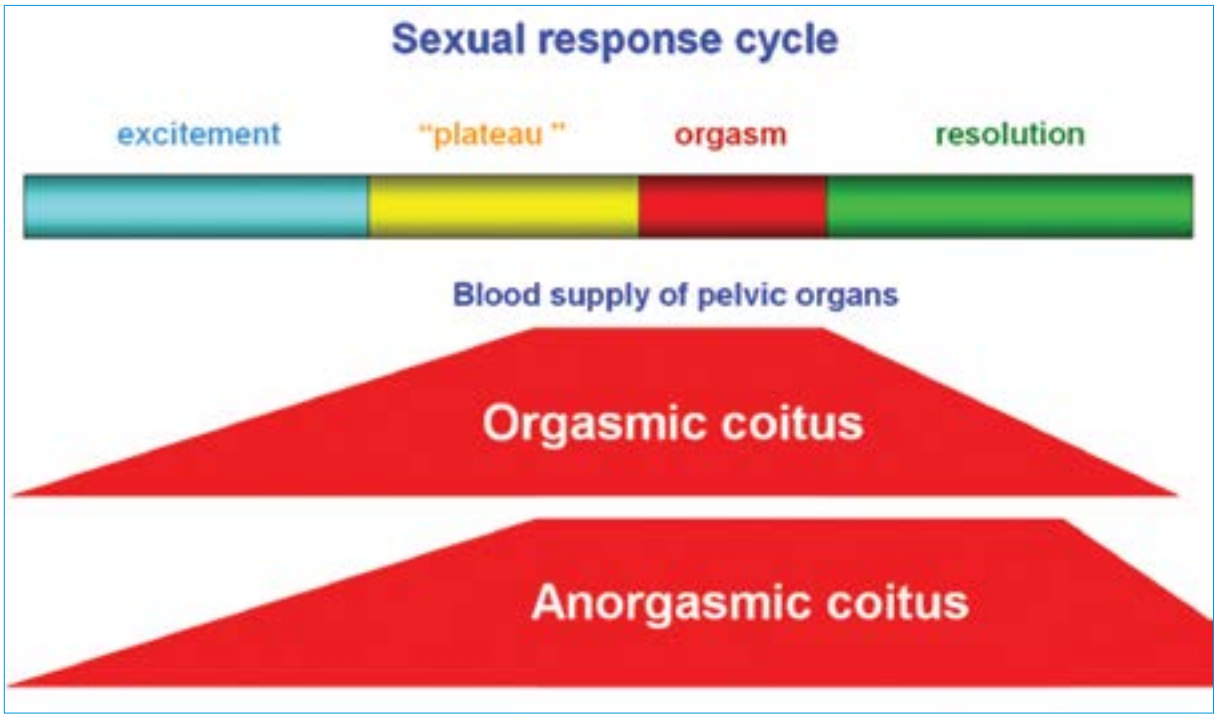

Figure 1. Blood supply of pelvic organs during anorgasmia in women.

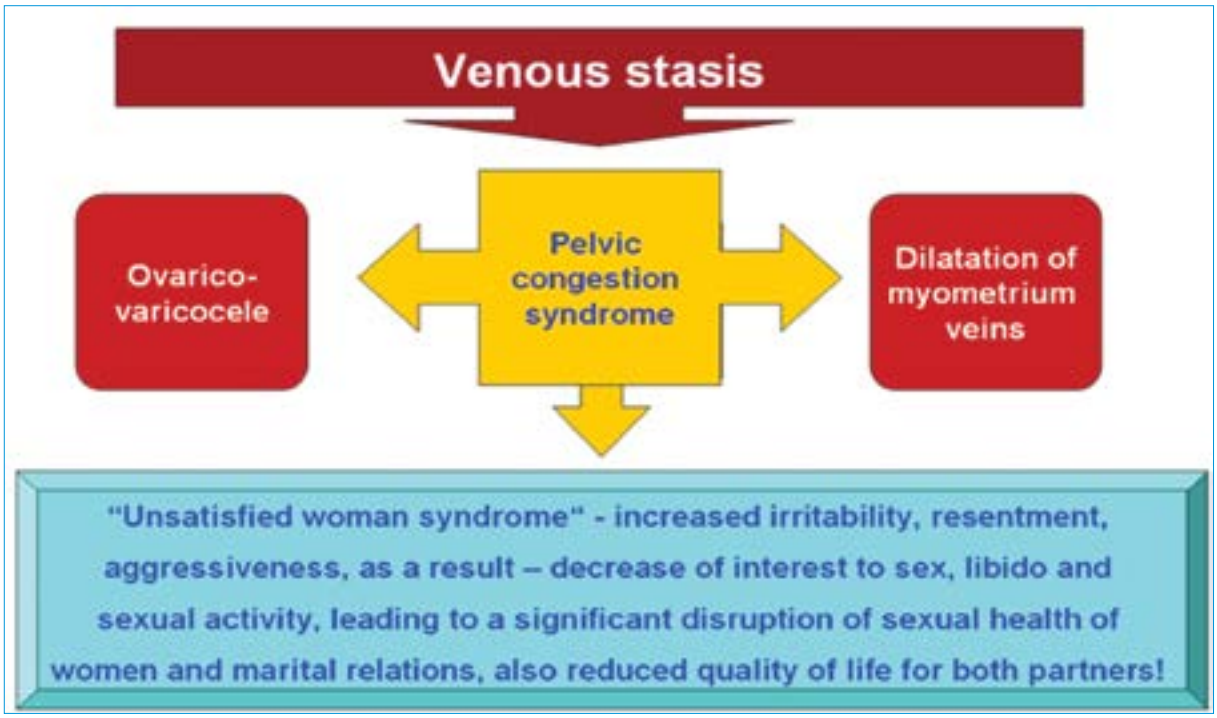

Figure 2. Anorgasmia in women – possible results.

Based on those mentioned above, the objective of our study was the detection of the **relationship between women's sexual functions (orgasm and libido) and gynecological pathologies**.

Materials and Methods

Six hundred seventy-six sexually active women (aged 18- 55 years, mean age 31,7+3) have been investigated based on the Center for Reproductive Medicine "Universe" and the outpatient clinics of Medical Corporation Evex. They were divided into three groups: I gr. – 148 women with ovarico-varicocele (OVVC), II gr. – 125 women with dilatation of the myometrium

veins (DMV) and III grade. – 403 women with other gynecological pathologies (myoma, inflammatory diseases, gynecological-endocrine disorders, etc.).

The diagnosis of patients was based on the analysis of patient records. Diagnosis of OVVC and DMV was based on the results of an investigation by transvaginal US of the pelvic venous system with Doppler examination of blood flow in the uterine veins.

In all groups, the frequency of orgasms (never, rare, often, always) and the grade of libido (low, medium, high) have been assessed by interviewing.

Statistical analysis was conducted by SPSS.21. The independent t-test was used for variables, e.g. age, duration of sexually active years and frequency of intercourse per month. Pearson's Chi-square test was performed to compare categorical data. Conclusions of the study results were based on statistically reliable results in a 95% confidence interval (P<0,05).

Results

There were no statistically significant differences (P>0.05) in women with different frequencies of orgasms in age, sexually active years, and number of intercourses per month.

Table 1. DAssociation of age, sexually active years, and number of intercourses per month with frequency of orgasms (Total number of investigated women: 676).

Orgasm	Number of women		Mean age	Mean duration of sexually active years	Mean number of intercourses per month
	abs	%			
Always	29	4.3	29.7±2.1	7.7±0.8	19.7±1.4
Often	173	25.6	30.3±1.9	6.8±0.6	16.8±1.5
Rare	265	39.2	32.5±2.4	9.8±1.0	14.6±1.3
Never	209	30.1	34.4±2.5	11.2±1.2	12.2±0.9
Total	676	100	31,7±2.2	8.9±0.9	15.8±1.3

Assessment of orgasms in different groups revealed a significant prevalence of anorgasmy in groups I and II, compared to the III group.

Table 2. Assessment of orgasm according to groups.

Orgasm	I group		II group		III group		P1	P2	P3
	abs.	%	abs.	%	abs.	%			
Always	3	2.0	5	4.0	21	5.2	P<0.01	P<0.01	P<0.05
Often	9	6.1	16	12.8	148	36.7	P<0.01	P<0.01	P<0.01
Rarely	31	20.9	55	44.0	179	44.4	P<0.01	P<0.01	P>0.05
Never	105	70.9	49	39.2	55	13.6	P<0.01	P<0.01	P<0.01
Total	148	100	125	100	403	100			

P1 – difference between I gr and II gr
P2 – difference between I gr and III gr
P3 – difference between II gr and III gr

There were no statistically significant differences (P>0.05) in any group between the frequencies of grades of libido.

Table 3. Assessment of libido according to groups.

Libido	I group		II group		III group		P1	P2	P3
	abs.	%	abs.	%	abs.	%			
Low	49	33.1	44	35.2	140	34.7	P>0.05	P>0.05	P>0.05
Medium	63	42.6	57	45.6	168	41.7	P>0.05	P>0.05	P>0.05
High	36	24.3	24	19.2	95	23.6	P>0.05	P>0.05	P>0.05
Total	148	100	125	100	403	100			

P1 – difference between I gr and II gr
P2 – difference between I gr and III gr
P3 – difference between II gr and III gr

Sexological evaluation of women according to groups

In the I group (women with ovarico-varicocele), the rate of women with anorgasmy (70,9%) and rare orgasms (20,9%) was significantly higher (P<0.01) than the rate of women who had orgasms often (6,1%) or always (2,0%).

As of relationship between intensity of sexual drive (libido) and frequency of orgasms – there was direct dependence – women with anorgasmia (70,9%) and rare frequency of orgasms (20,9%) mainly had low (38,7-41,9%) or medium (35,2-43,8%) libido and in women, who had orgasms often (6,1%) or always (2,0%) libido was mainly medium (44,4-55,6%) or high (100%).

Table 4. Sexological evaluation of women in the I group.

Orgasm	Number of women		Libido low		Libido medium		Libido high	
	abs.	%	abs.	%	abs.	%	abs.	%
Always	3	2.0					3	100
Often	9	6.1			4	44.4	5	55.6
Rarely	31	20.9	12	38.7	13	41.9	6	19.4
Never	105	70.9	37	35.2	46	43.8	22	21.0
Total	148	100	49		63		36	

In the II group (women with dilatation of myometrium veins), the rate of women with anorgasmy (39,2%) and rare orgasms (44,0%) was significantly higher (P<0.01) than that of women who had orgasms often (12,8%) or always (4,0%).

As of relationship between intensity of sexual drive (libido) and frequency of orgasms – in this group also there was direct dependence – women with anorgasmy (39,2 %) and rare frequency of orgasms (44,0 %) mainly had low (20,0-59,2%) or medium (40,8-52,7%) libido and in women, who had orgasms often (12,8%) or always (4,0%) libido was mainly medium (20,0-43,8%) or high (20,0-80,0%).

Table 5. Sexological evaluation of women in the II group.

Orgasm	Number of women		Libido low		Libido medium		Libido high	
	abs.	%	abs.	%	abs.	%	abs.	%
Always	5	4.0	0	0	1	20	4	80
Often	16	12.8	4	25.0	7	43.8	5	31.3
Rarely	55	44.0	11	20.0	29	52.7	15	27.3
Never	49	39.2	29	59.2	20	40.8	0	0
Total	125	100	44		57		24	

In the III group, we generally observed prevalence of women without absolute absence or presence of orgasms – the rate of women, who had orgasms often (36,7%) or rarely (44,4%) was significantly higher (P<0.01) than women, who had orgasms always (5,2%) or never (13,6%).

As of relationship between intensity of sexual drive (libido) and frequency of orgasms – in this group also there was direct dependence, but not so expressed as in I and II groups – women with anorgasmy (13,6 %) and rare frequency of orgasms (44,4 %) mainly had low (41,9-49,1%) or medium (23,6-45,3%) libido and in women, who had orgasms often (36,7%) or always (5,2%) libido was mainly medium (14,3-48,0%) or high (26,4-85,7%).

Table 6. Sexological evaluation of women in the III group.

Orgasm	Number of women		Libido low		Libido medium		Libido high	
	abs.	%	abs.	%	abs.	%	abs.	%
Always	21	5.2	0	0	3	14.3	18	85.7
Often	148	36.7	38	25.7	71	48.0	39	26.4
Rarely	179	44.4	75	41.9	71	45.3	23	12.8
Never	55	13.6	27	49.1	13	23.6	15	27.3
Total	403	100	140		168		95	

Discussion

Study results provide a fruitful field for analysis and discussion. Prevalence of anorgasmy and rare frequency of orgasms in women with OVVC and DMV might be considered as evidence of the causal influence of anorgasmic coitus on the development of congestive processes in the small pelvis, with further development of varicose changes of ovarian veins and dilatation of myometrium veins. In itself, OVVC and DMV might be suitable bases for amplification of other gynecological pathologies and conditions.

Ovarian varicose veins characterize themselves in the form of dilated, tortuous, and congested veins next to the ovarian gland, often causing chronic pelvic pain and a feeling of heaviness in the pelvis in women.[13,14]

Several studies have demonstrated that over 50% of patients with ovarian varicose veins have polycystic ovaries,[15,30] and that the morphologic and functional changes in the polycystic ovary syndrome increase the risk of cancer,[16,18] venous thrombosis,[17,18] infertility, and cardiovascular problems,[19] as well as decreasing the ovarian reserve.[16]

Increased oxidative stress (OS) in varicose dilations provokes histological damage in the ovaries and suggests an adverse effect related to fertility.[20] Moreover, researchers have also evidenced that female infertility may increase the risk of cancer and other pathologies.[21,22]

Some authors have demonstrated the frequency of ovarian varicose veins in women by pathology: in women who suffered from chronic pelvic pain, the prevalence was 50%23,24, in women with endometriosis, the prevalence was 80%25, in women who had endometriomas in the left ovary, the prevalence was 100%.[2]

The therapeutic test suggests that varicose veins cause destruction of tissue and organs, OS in endothelial cells, and, as a result of these damages, the alteration of the expression of several genes.[27-29]

Congestive processes in the pelvis can influence varicose dilatation of pelvic veins, including myometrium veins,[30,31] which might be complicated with thrombosis, development of cystic and malignant formations.[32, 33]

Congestive processes and varicose of ovarian or pelvic veins often are causes of chronic pelvic pain,[34,35] which in turn can influence orgasmic functions and determine anorgasmy.

Summarizing all the above-mentioned, we can conclude that orgasmic dysfunctions (anorgasmy) can promote a congestive process in the pelvis, development of varicosis of ovarian and pelvic veins (with corresponding other gynecological complications), which themselves can determine chronic pelvic pain that deepens the anorgasmic process. So, a locked, vicious circle is forming, and the only strategy to manage this situation is a complex approach for treating all components and conditions. Also, in younger ages and early stages of the beginning of sexual life, timely management of anorgasmy might be a good prevention for further development of gynecological pathologies.

Conclusions

Orgasmic dysfunctions (anorgasmy) can promote a congestive process in the pelvis, development of varicosis of ovarian and pelvic veins (with corresponding other gynecological complications), which themselves can determine chronic pelvic pain that deepens the anorgasmic process.

In younger ages and early stages of the beginning of sexual life, timely management of anorgasmy might be a good prevention for further development of gynecological pathologies.

The issue requires further investigation to reveal the cause-and-effect relationship.

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