

The Current State Of Diagnosis And Management Of Patients With Pelvic Organ Distension And Mixed Urinary Incontinence

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Abstract: Urinary incontinence in women remains one of the most complex and unresolved issues in urogynecology worldwide. Its prevalence increases with age, affecting approximately 25% of women aged 30 to 60 years and more than 50% of women over 60. Despite numerous proposed treatment methods, various theories explaining the causes of this condition, and specific treatment approaches, the problem remains unresolved. This issue significantly impacts nearly all aspects of life, severely complicates professional activities, limits social interactions, and disrupts harmony in family relationships.

Keywords: urogenital incontinence, pelvic organ prolapse (POP), genital prolapse, pelvic floor, stress urinary incontinence, rectocele, cystocele, urodynamic disorders, etiology of genital prolapse, reproductive health, hormone replacement therapy (HRT), post menopause, anatomical connections of pelvic organs, urogynecology, work capacity and quality of life.

Introduction

The primary cause of urinary incontinence in women is the decreased tone of the pelvic floor muscles, leading to pelvic organ prolapse (uterus, vagina, bladder, urethra), damage to the connective tissue structures of the pelvic floor, and impaired coordination of various muscle groups.

Thus, urinary incontinence in women remains one of the most serious issues in urogynecology, with treatment methods still requiring further optimization. Therefore, research focused on studying the outcomes of surgical treatment for this pathology and identifying ways to improve its effectiveness holds significant scientific and practical interest.

Literature Review

Pelvic organ prolapse (POP) is a condition characterized by the displacement of female pelvic organs from their physiological position into or through the vaginal canal. Currently, POP represents a significant medical, social, and ethical issue.

The prevalence among women, according to various authors, ranges from 5% to 48% [2]. Due to its multifactorial nature, this condition is observed across a broad age spectrum. POP predominantly occurs during the late reproductive and perimenopausal periods. While pelvic organ prolapse was considered a disease of the elderly in the 1970s, today, the average age of patients is 50 years. Notably, some data suggest that up to 26% of patients are younger than 40 years. Among older and elderly women, the prevalence of POP rises to 50–60% and is often associated with various urogenital disorders, which occur in up to 80% of postmenopausal women. In the structure of gynecological morbidity in our country, genital prolapse accounts for 15–30% [7]. Surgical correction of pelvic organ prolapse ranks third among indications for operative treatment, following benign tumors and endometriosis [4].

In recent years, there has been a trend toward the "rejuvenation" of this pathology. Over the next thirty years, the number of women with pathophysiological prerequisites for prolapse and pelvic organ dysfunction is expected to double. For this reason, the condition has been referred to as a "hidden epidemic," underscoring its growing relevance [5, 6].

Etiology and Pathogenesis

A review of the literature reveals significant scientific advancements that have expanded understanding of the etiology and pathogenesis of POP. It is widely accepted that pelvic floor dysfunction is the primary factor in

prolapse development [4]. Pelvic organ prolapse can be considered a type of pelvic hernia, consisting of a hernial defect, sac, and its contents [1].

The etiology of genital prolapse is multifactorial. The most significant contributing factors include:

- approximately one-third of women report childbirth-related injuries (soft tissue tears, high parity, large fetus) as the main cause of POP symptoms [7].

The duration of the second stage of labor also increases the risk of pelvic floor dysfunction;

- any pregnancy lasting more than 20 weeks, regardless of the mode of delivery, increases the risk of POP [8, 9];

- the prevalence of urogenital disorders increases during peri- and post menopause due to declining sex hormone levels [10];

- prolonged heavy physical activity predisposes individuals to prolapse development [11].

Clinical Manifestations and Consequences. Pelvic organ prolapse leads to various complications, including:

- urogenital disorders (urinary incontinence, difficulty urinating);

- defecation issues (constipation, rectocele);

- socioeconomic consequences (reduced work capacity, decreased quality of life).

The most common symptom is stressing urinary incontinence, reported in 32–50% of patients [12]. This condition significantly affects women's health, reproductive function, professional activity, and social behavior.

Treatment and Prevention

Treatment of POP includes both conservative and surgical approaches. Conservative methods, such as physiotherapy and pessary use, are effective in the early stages of the disease. Surgical correction is required for significant changes. Preventive measures include timely restoration of pelvic floor damage after childbirth and the use of hormone replacement therapy during post menopause [13].

Conclusion

Pelvic organ prolapse is a progressive condition that requires early detection and a comprehensive treatment approach. Given the trends of population aging and increased life expectancy, it is crucial to focus on prevention, improving diagnostic methods, and optimizing therapy for this disease.

List of References:

1. Aleksandrov V.B. *Laparoscopic Technologies in Colorectal Surgery* / V.B. Aleksandrov. - Moscow: Medpraktika-M, 2023. - 188 p.
2. Alipiev V.Yu. On the Feasibility of Combined Surgeries in Proctological Patients / V.Yu. Alipiev, A.B. Sorogin // *Surgery*. - 2020. - No. 1. - Pp. 41-43.
3. Al-Shukri S.Kh., Kuzmin I.V. Treatment of Urinary Incontinence Using Biofeedback / S.Kh. Al-Shukri, I.V. Kuzmin // *Biofeedback*. - 2017. - No. 1. - Pp. 15-16.
4. *Operative Gynecology* / edited by V.I. Kulakov. - Moscow: Medicine, 1990. - 464 p.
5. Operations for Combined Prolapse of the Rectum and Uterus, Anal Sphincter Insufficiency, and Rectocele / T.V. Abuladze [et al.] // *Actual Problems of Coloproctology*. V Russian Conference with International Participation. - Abstracts. - Rostov-on-Don, 2021. - P. 4.
6. Raz Surgery in Treating Stress Urinary Incontinence in Women / O.B. Loran [et al.] // *Urology and Nephrology*. - 2023. - No. 1. - Pp. 37-41.
7. Balan V.E. Urogenital Disorders in Climacteric (Clinic, Diagnosis, Hormone Replacement Therapy): Doctoral Thesis / V.E. Balan. - Moscow, 2018.
8. Braude I.L. *Operative Gynecology* / I.L. Braude. - Moscow: Medgiz, 2017. - 2nd Edition. - 656 p.
9. Diagnosis and Treatment of Complex and Mixed Forms of Urinary Incontinence / S.N. Buyanova [et al.] // *Obstetrics and Gynecology*. - 2005. - No. 1. - Pp. 54-57.
10. Diagnostic Value of Combined Urodynamic Studies in Various Forms of Urinary Incontinence in Women / D.Yu. Pushkar [et al.] // *Urology and Nephrology*. - 2016. - No. 4. - Pp. 21-25.

11. Tevlin K.P. Function of Lower Urinary Tracts in Women after Surgical Correction of Urinary Incontinence: Thesis Abstract for Candidate of Medical Sciences / K.P. Tevlin. - Moscow, 2017.
12. Pathogenesis of Atrophic Cystourethritis and Various Types of Urinary Incontinence in Women during Climacteric / V.E. Balan [et al.] // Consilium Medicum. - 2021. - Vol. 3, No. 7. - Pp. 322-331.
13. A Multi-Center Analysis of the Efficiency of Tension-Free Vaginal Tape (TVT) in Korea / J. Lee [et al.] // International Continence Society (ICS). - 2019. - ABS: 246.
14. A Short Form of the Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12) / R.G. Rogers [et al.] // International Urogynecology Journal of Pelvic Floor Dysfunction. - 2023. - Vol. 14, No. 3. - Pp. 164-168.
15. A Technique for Perineal Rectosigmoidectomy Using Autosuture Devices / F.D. Vermeulen [et al.] // Surgery, Gynecology & Obstetrics. - 2023. - Vol. 156, No. 1. - Pp. 85-86.
16. A Transvaginal Approach to Repair of Apical and Other Associated Sites of Pelvic Organ Prolapse with Uterosacral Ligaments / B.L. Shull [et al.] // American Journal of Obstetrics and Gynecology. - 2022. - Vol. 186, No. 4. - Pp. 852-853.
17. Abdominal Management of Rectocele and Enterocele: Place of Laparoscopic Approach / J.P. Grandjean [et al.] // Annales de Chirurgie. - 2024. - Vol. 129, No. 2. - Pp. 87-93.
18. Abdominal Rectopexy for Rectal Prolapse / M. Scaglia [et al.] // Diseases of the Colon & Rectum. - 2024. - Vol. 37, No. 6. - Pp. 805-813.
19. Abdominal Sacral Colpopexy with Mersilene Mesh in Retroperitoneal Position in the Management of Post-Hysterectomy Vaginal Vault Prolapse and Enterocele / W.A. Addison [et al.] // American Journal of Obstetrics and Gynecology. - 2022. - Vol. 153, No. 2. - Pp. 140-146.
20. Abdominal Spinal Curvature and Its Relationship to Pelvic Organ Prolapse / T.F. Mattox [et al.] // American Journal of Obstetrics and Gynecology. - 2023. - Vol. 183, No. 6. - Pp. 1381-1384.
21. Abrams P., Fenety R., Torrens M. *Urodynamics* / P. Abrams, R. Fenety, M. Torrens. - Springer-Verlag; Berlin, Heidelberg, New York, 2023. - 225 p.