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ANALYTICAL REVIEW OF THE LITERATURE ON THE DIAGNOSIS AND TREATMENT OF STRESS URINARY INCONTINENCE

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Abstract
A review of modern publications shows that stress urinary incontinence remains an urgent interdisciplinary problem. The introduction of standardized questionnaires and unified diagnostic algorithms will improve the quality of care for women with incontinence. Current research supports the effectiveness of a combination of non-drug and surgical approaches. It is advisable to consider conservative methods as the first line of therapy. Mid-urethral slings provide long-term clinical benefit with minimal complication rates. At the same time, attention to psycho-emotional and social aspects, quality of life and microbiological changes opens up new perspectives for a personalized approach in treatment.

Keywords: Woman, stress, bladder, incontenence, diagnosis, questionnaire, treatment, operation, electrical stimulation.

Introduction

Overactivity of the bladder, clinically simulating or combined urinary incontinence, complicates the detection of this form of urinary incontinence and causes the erroneous use of surgical correction of the urinary retention defect, which could often be avoided [1, 3, 4, 9, 10, 21, 24]. The difficulty of diagnosing this condition lies in the fact that the detrusor hyperreactivity may not be felt by the patient, not accompanied by urinary urges, but only by symptoms of urinary incontinence with tension [6, 8, 14, 17]. Experience accumulated in recent years has shown that detrusor hyperactivity can be not only an independent cause of urinary incontinence, but also imitate the clinic of this disease [2, 5, 7, 11, 12, 15].

Objective of the study

Analytical review of the literature on the diagnosis and treatment of stress urinary incontinence

Discussion

It should be noted that the diagnosis of any disease begins with a correctly collected history and a correct assessment of the patient's complaints, which are subsequently

supplemented with instrumental research methods [2, 9, 12, 18, 19, 21, 24]. The patient's stress incontinence complaints are intimate enough to cause tightness when talking to a doctor. The doctor should be able to confidentially ask those questions that will identify complaints characteristic of stress urinary incontinence in order to continue the diagnostic search in the right direction. The inability, and perhaps the reluctance of the specialist to pay attention to typical complaints and anamnestic data, which in the overwhelming majority of cases are present in women with stress urinary incontinence, lead to the fact that this disease is often hidden behind the diagnosis of chronic cystitis, and patients take antibacterial drugs for a long time and unreasonably [13, 17, 20, 22]. The lack of a clear algorithm for diagnosing this disease makes it difficult to understand the causes of urinary incontinence and, accordingly, complicates the choice of therapeutic tactics [2, 3, 4, 5].

According to the authors, the traditional set of studies for urinary incontinence in women should include: assessing complaints and collecting a history; urinary diary; laboratory tests; vaginal examination; cystourethroscopy; excretory urography; ascending cystography; ultrasonographic study; combined urodynamic study; ambulatory urodynamic monitoring; nuclear magnetic tomography [4, 5, 20, 22].

Previously, it was believed that diagnosing stress urinary incontinence in women is not very difficult. So, according to some authors, the diagnosis of stress urinary incontinence can only be made on the basis of a carefully collected history and examination of the patient in a gynecological chair. The majority of American scientists are of the same opinion [2, 3, 9, 12, 19].

Anamnestic clarification of the type of urinary incontinence should be quite clear, since it determines the focus and scope of further studies [3, 5, 7, 9, 18]. It is advisable to assess symptoms by compiling a urination diary, which indicates the frequency of urination, the allocated volume of each urination, the number of episodes of urinary incontinence per day, the use of pads, daily fluid consumption, whether urination is accompanied by pain, etc. [2, 4, 9, 10, 11, 12, 16]. For the differential diagnosis of stress and imperative urinary incontinence in women, there are a large number of questionnaire tests.

Until recently, mainly endoscopic and radiological methods were used to diagnose stress incontinence in women. However, the complexity of the physiological processes of the lower urinary tract made it necessary to conduct a comprehensive urological, gynecological and neurological examination to identify the causes of urinary incontinence. At the same time, standard research methods may be insufficient for mixed urinary incontinence in women [2, 5, 9, 11, 13, 22].

Urodynamic studies are currently an objective method of qualitative assessment of urinary disorders, and the choice of the optimal treatment strategy for urinary incontinence depends on them [7, 8, 16, 18, 23, 24]. At the same time, when analyzing the literature, there are works in which the authors express different opinions regarding the value of urodynamic research for assessing urethral function in patients with stress urinary incontinence [2, 3, 5, 9, 11, 12, 24].

Since the 80-90s of the last century, urologists from different countries have been actively looking for a simpler and more advanced method of treating tension incontinence. Many authors have developed and modified more than 250 different operations for the treatment of urinary incontinence in women, which were divided into 4 main groups [18, 20, 21, 22, 23, 24]: 1) operations that restore normal vesicourethral anatomy by vaginal access; 2) operations related to the so-called posadilonic urethrocystocervicopexies in various modifications; 3) operations correcting the vesicourethral anatomy and fixing the musculo-ligamentous apparatus; 4) sling (loop) operations in various modifications.

Of the large number of existing methods of surgical correction of stress urinary incontinence in women, currently minimally invasive interventions using freely implantable synthetic, more often polypropylene suburethral tapes are undoubtedly preferred [1, 14, 16, 19, 20]. Over 10 years of clinical practice, urethrosuspension with a free synthetic loop has become the most common method of surgical correction of stress incontinence, and TVT surgery is the "gold standard" treatment with which the effectiveness of other methods is compared. Its clinical efficacy, according to numerous authors, reaches from 82 to 96% [1, 17, 23, 24]. Following this, hundreds of studies appeared in the world press confirming the high clinical effectiveness of the proposed approach [18, 19, 22, 23].

In recent years, so-called short loops or "minislings" have appeared for the treatment of stress urinary incontinence [16, 22, 23, 24]. The technology of their installation does not imply the removal of the tape on the skin and contact with the wall of the bladder, which is designed to minimize the procedure. The pioneer of the development of "minisling" was Gynecare (Ethicon), which launched the TVT-Secur (TVT-S) system on the market in 2005. The first data on the new product were contradictory. Clinical efficacy at early follow-up in different authors ranged from 47 to 83.3% [1, 17, 18, 23, 24].

A meta-analysis of some authors [1, 4, 16, 18, 22, 23, 24] made it possible for the first time to summarize the results of numerous randomized clinical trials evaluating the effectiveness of TVT in comparison with other surgical methods for the treatment of stress urinary incontinence. The results of the meta-analysis showed that, despite

significant advances in surgical treatment of stress urinary incontinence, the effectiveness of eliminating the disease ranges from 20 to 93%.

However, to date, there is no data on the incidence of postoperative complications in long-term follow-up (more than 10 years). Approximately 10% of women have undergone operations on the pelvic floor during their lifetime and almost 30% of these operations for relapse of the disease. The frequency of relapses and unsatisfactory treatment results remains high, despite the introduction of many new diagnostic methods and improvements in surgical techniques [4, 6, 17, 18, 19, 20].

Conclusion

A review of modern publications shows that SNM remains an urgent interdisciplinary problem. The introduction of standardized questionnaires and unified diagnostic algorithms will improve the quality of care for women with incontinence. Current research supports the effectiveness of a combination of non-drug and surgical approaches. Conservative methods (biofidbek, electrical stimulation) are advisable to consider as the first line of therapy. Mid-urethral slings provide long-term clinical benefit with minimal complication rates. At the same time, attention to psycho-emotional and social aspects, quality of life and microbiological changes opens up new perspectives for a personalized approach in treatment.

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