

appropriate management options and to determine the associated cost benefits, risks and prognosis for treatment success.

Aim of the study. Assessment of clinical data of azoospermia males evaluated during 2019 to show aetiology factors distribution within included patients.

Materials and methods. A retrospective record review of data collected from 46 azoospermic males was done. The mean age of infertility patients was 31.3 ± 5.2 years. All participants were examined using a standardized andrology workup, accompanied by a structured medical interview. The hormonal analysis included serum FSH, LH and testosterone and genetic assessment (AZF, CFRT and Karyotyping) was done. The diagnosis of azoospermia it was confirmed by centrifugation of a semen specimen for 15 min at room temperature with high-powered microscopic examination of the pellet and a centrifugation speed of at least 3,000 rot/min. TESE outcome and histology investigation of biopsies it was used for final distribution of the patients.

Results. 21 (45.65%) patients with normal testis size, normal hormonal profile and no genetic defects were diagnosed. In this group, TESE outcome it was successful for 16 (76.19%) patients with normal histology exam, 3 (6.52%) patients with unsuccessful TESE outcome and meiotic arrest on histological results, and 2 (4.34%) patients with unsuccessful TESE outcome and no data on histologic phenotype. 17 (36.95%) patients with bilateral or unilateral testis atrophy, abnormal hormonal profile and no genetic defects. In this group just for 5 (29.41%) patients it was performed TESE and all 5 patients were found with negative sperm extraction and histologic phenotype – mixed atrophy and Sertoli cell-only syndrome. In the same group 10 (21.73%) patients with the history of Mumps orchitis in the post-pubertal period, bilateral testis atrophy and hypergonadotropic hypogonadism. 8 (17.39%) patients with genetic defects: 4 (8.69%) with Klinefelter syndrome, 3 (6.52%) with AZF deletion (1 patient with AZFa deletion and 2 patients with AZFbc) and one patient with CFTR mutation.

Conclusions. Patients with bilateral or unilateral testis atrophy and abnormal hormonal profile should be karyotyped and screened for Y chromosome microdeletions; these analyses lead to a diagnosis in more than 15% of cases and contraindicate a testicular biopsy when a full AZFa and/or AZFb microdeletion is present. Percentage of patients with the history of Mumps orchitis is much higher than in other populations because of mumps epidemic parotitis in 2008.

Key words: male infertility, azoospermia, AZF deletions, Klinefelter syndrome, TESE, CFTR mutation.

89. NON-INVASIVE EVALUATION OF AUTONOMIC NERVOUS SYSTEM DYSFUNCTION IN IDIOPATHIC OVERACTIVE BLADDER IN WOMAN

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Introduction. Overactive bladder (OAB) syndrome is characterized by urgency with or without urgency incontinence that is usually associated with increased daytime frequency and nocturia. The exclusion of urological (obstructive, infectious, neoplastic disease or lithiasis) or neurological disorders leads to the diagnosis of idiopathic OAB syndrome, being a common disorder, especially in women. The pathophysiology of iOAB remains unclear, but two main

hypotheses currently being considered include myogenic and neurogenic dysfunction that involves a specific dysfunction of the autonomic nervous system.

Aim of the study. To determine what are the different methods used in evidence for autonomic nervous system (ANS) dysfunction in females with iOAB.

Materials and methods.. This study is a systematic review of data of publications of the last 10 years on the selected theme using PubMed system. According to a key phrase “autonomic nervous system in overactive bladder”, “evaluation of idiopathic overactive bladder” 90 publications were found, 32 publications were selected and analysed. Research includes data from 15 publications.

Results. The OAB symptom score, which goes from 0 to 15, is subjective and has limitations, and urodynamic investigations can be invasive and are time consuming. Here is a need for a reliable, objective, and non-invasive methods of measuring the activity of the nerve fibres that control the urge to urinate and urination. Autonomic dysfunction in the genital area can be assessed using sympathetic skin response (SSR). The absence of SSR may be a sign of autonomic dysfunction and also of iOAB. SSR tests can be used for the detection of early iOAB and assessing those likely to be refractory to anticholinergic drugs in iOAB. Autonomic cardiovascular testing in females are associated with iOAB without detrusor overactivity, and “sensory urgency” could be related to a sympathetic dysfunction. Measuring the heart rate variability (HRV) provides a non-invasive approach to detecting autonomic imbalances. The reductions of HRV values in patients with iOAB suggest that the autonomic nervous system is altered and may be a factor in disturbed bladder function. Was demonstrated that deep respiration heart rate variations increased in patients with iOAB. These results reflect parasympathetic hyperactivity. Functional studies such as pupillometry would be helpful for understanding the iOAB and serve as an aid to the development of therapeutic options.

Conclusions. The researches presented in this review strongly support that dysfunction in the ANS balance could be involved in the pathophysiology of iOAB and further using the diagnostic methods to monitor treatment response and apply them to pharmacological or surgical treatment. And because of their non-invasiveness, these methods can also be used in children.

Key words: autonomic nervous system, idiopathic overactive bladder, women.

90. TRANSURETHRAL THULIUM LASER VAPOENUCLEATION OF PROSTATE – A GOOD ALTERNATIVE FOR OPEN SURGERY

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Introduction. Treatment of huge benign prostatic hyperplasia (BPH) consists an actual problem for urological community. Nowadays, open surgery is one of the basic surgical methods in treatment of large BPH, but it is less used due to the modern laser techniques. Spreading of laser surgery offers some new opportunities for its treatment. Safety of Thulium:YAG laser in transurethral vapoenucleation of the prostate in combination with its efficiency assure a good alternative for classic open surgery in BPH treatment.