VARICOCELE AND FERTILITY - DIAGNOSTIC, CLINICAL AND PROGNOSTIC PROBLEMS

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Varicosities of Plexus pampiniformis present a disease with asymptomatic course and long-lasting disturbance of germinative and sexual male functions (in 20-80% of the cases) (1-3). There are two forms - idiopathic and symptomatic varicocele. Idiopathic one is of greater clinical significance affecting mainly the left Plexus pampiniformis. It occurs in male patients of all age groups most commonly manifested between 18 and 55 years of age, i.e. in the active reproductive and sexual age (3-5). This indicates the role of timely diagnosis and treatment of idiopathic varicocele contributing to restoration of disturbed reproductive and sexual functions.

A total of 75 males with idiopathic varicocele aged between 18 and 50 years having looked for an andrological aid on the occasion of infertile marriage or impotence were clinically examined. There was a left varicosity of Pl. pampiniformis in 72 cases but a bilateral one in the rest 3 cases. A three-fold seminological examination was carried out. According to definite indications, testicular biopsy was performed in 27 cases. Material was processed by conventional methods for both light and electron microscopies. Anamnestically, idiopathic varicocele was diagnosed between the first and third year of marriage. Local genital status demonstrated varicosity of Pl. pampiniformis manifested to a different extent (fig. 1). Seminological syndrome of these patients showed oligoasthenozoospermia of 1st, 2nd and 3rd degree, teratospermia and azoospermia (fig. 2). The comparison of results from both figures reveals a direct correlation between the severity of clinical picture of idiopathic varicocele and the degree of pathospermia.

Pathohistologically, there are transitory and definite testicular changes concerning fertility treatment and prognosis. In patients with varicocele diagnosed between 3 and 5 years ago and with oligoasthenozoospermia of 1st and 2nd degree after timely performed vasectomy there was germ cell disorganization and partially expressed intratubular suppression of maturation at the level of spermatid in the left testis and germ cell disorganization and hypospermatogenesis and maturation suppression at late spermatid
level in the right testis. In patients with late diagnosis (after 5 years) of idiopathic varicocele of 2\textsuperscript{nd}-3\textsuperscript{rd} degree and oligoasthenozoospermia of 2\textsuperscript{nd}-3\textsuperscript{rd} degree there are severe and irreversible structural alterations in the left testis.

We establish an intratubular cessation of maturation at the level of zygotenic and pachytenic spermatocytes of first order and early spermatids as well. One can see a severe germinal aplasia and Leydig cell proliferation in more severe cases. In the right testis there is germ cell disorganization and intratubular suppression of maturation at the level of late spermatid, stage 4.

Our data from the clinical, seminological and morphological investigations demonstrate the degree of testicular lesions in patients with idiopathic varicocele and, with a view to fertility prognosis, the necessity of early diagnosis and timely surgical and medicamentous treatment of this disease.