ALCOHOL INFLUENCE ON MALE FERTILITY - CLINICAL AND STATISTICAL EXAMINATION

B. Nanova
Department of Anatomy, Histology and Embryology, Varna

Recently, there is an increased interest in the action of alcohol, drugs and smoking on male reproductive system (1-6). It is experimentally established that alcohol exerts a depressive effect on the functions of male gonads and endocrine organs. Having in mind the fact that alcohol is one of the habitual poisons and its systematic use is increasing nowadays we performed an investigation with a view to prognosis and treatment of male infertility. Data are taken from dispensary cards of 305 patients registered in the Andrology Consulting Room of the Medical University, Varna, during 1990 on the occasion of family childlessness and impotence. Some basic indexes of seminological analysis are statistically processed. Patients are divided into the following groups (fig. 1). Our data indicate that in patients with alcohol consumption the main reason is known in 86.77% of the cases with ejaculate pathology (fig. 2).

![Fig. 1. Correlation between alcohol abuse and etiology of ejaculate disorders](image)

![Fig. 2. Patients with/without ejaculate disorders with/without known etiology](image)

The analysis of the cases with known etiological factor (a total of 164 patients) shows that those with congenital and acquired andrological diseases account for 52.44% and their number prevails over that of patients working in severe and harmful industrial conditions (in 34.76%). Last come patients with chronic, complicated and ascendant inflammatory diseases of the male reproductive tract (in 12.80%) (fig. 3). Patients without alcohol consumption and known etiology of ejaculate disturbances are divided in the following groups (fig. 4). Males with andrological diseases come first (with 76.70% of the cases) followed by those working in dangerous to health condi-
tions (in 20.39 %) and by those with inflammatory genital tract diseases (in 2.91% only). Having in mind literature data we suppose that in patients with systematic alcohol consumption pathospermia (in 13.23 % of the cases) can be considered to a great extent a result from alcoholism.

The comparison between the two main groups allows the assumption that in all alcohol consuming patients ethanol as an etiologic factor aggravates seriously fertility prognosis. This fact is rather obvious mainly in patients working in harmful occupational environment (oligoasthenozoospermia of 2nd-3rd degree, azoospermia included): in 78.14 % of the cases from the 1st and in 61.71 % of the cases in the 2nd group. Probably, this can be explained by the same pathogenetical mechanism of action of damaging factors, i.e. by the angio-dystonic syndrome. Alcohol aggravates the state in patients with inflammatory genital tract diseases, too - in 81.88 % of the cases from the 1st and in 33.33 % of the cases from the 2nd group. However, there is no such a big difference between patients with congenital and acquired andrological diseases in both main groups (in 72.42 % and in 64.34 % of the cases, respectively) which can be due to severe structural and definitive alterations in the testes. We can conclude that alcohol being a habitual poison in man presents an aggravating factor to fertility prognosis in all patients with infertility.