Psychologic Follow-up of Personality Factors in the Chromosomal Anomaly of Klinefelter's Syndrome

K. ČINOVSKÝ, F. LÁBADY, J. KOBLIK

Department of Urology, Medical School Hospital, Outpatient Department of Sexology, Department of Clinical Genetics, Medical School Hospital, Bratislava, Czechoslovakia

(Received January 11, 1985)

The authors deal with the psychopathology of the genetic-andrologic disorder of Klinefelter's syndrome. The problem is analysed from the point of view of mental level, personal characteristics, sexual life and tendency to psychical maladaptation in this disorder. In the theoretical part the results of researches of other authors are summarized. In the research the given hypotheses are verified in nine sample cases of the 47 XXY syndrome and the sample is characterized. The total results enable to recognize several psychologic correlations of the mentioned syndrome, and the complete clinical picture of the disease.

In 1942, Klinefelter described the chromosomal anomaly characterized by typical somatic marks and by a typical spermiogram. The incidence of this syndrome is estimated at 1:500 male live births [2]. As early as 1953, Züblin observed that males with this syndrome are characterized by a certain infantilism, timidity and lack of energy. Penrose claimed that a mental defect occurred in 12% of the cases [13].

Clinical picture

The syndrome is characterized by sterility which ordinarily induces patients to seek help. The authors have found also characteristic psychosomatic disorders, weakness of mental capabilities, characteristic features of personality and sexual disorders.

Mental abilities

In sex chromatin studies involving 670 pupils of schools for the mentally retarded, 3 cases of this syndrome were found [6]. In a population of 1193 pupils of schools for the mentally retarded (age 8–16 years), there were 12 cases [10]. Huber [3] followed up 12 patients aged 15–31 years. He characterized 6 cases as having decreased mental levels.

In adult age the levels of mental development are different, most often, however, they are in the sphere of the subnormal [12]. It is pointed out that a larger number of redundant chromosomes is directly proportional to the severity of the mental disturbance. The equipment with a double X is ordinarily connected with the subnormal [2]. Other authors are also inclined to accept this conclusion.
Orman et al. [7] and Nielsen [8] have found in 28 patients IQs varying from 72 to 106, with an average of 90. In another investigation of hospitalized psychiatric cases 12 male patients with the syndrome 47 XXY had IQ of 96.

**Characteristic features of personality**

In a follow-up study of 25 children up to the age of 15 years, Rajska [10] found a decrease in activity, later on a narrowing of interests. In the early school age clumsiness, passivity, lack of success in studies were noted. These features are distinctly manifested in the adolescent age. Inclination to depression, infantilism, psychic perversity, superficiality of emotional experiences, submissiveness, asthenia also occur. Orman found in patients slowness of action and reservedness which characterize the syndrome in a similar way. Nielsen in 1969 described asocial behaviour in 1% [8]. The reason is generally an unsuitable social microclimate, features of personality, plus incidental mental retardation.

A premorbid personality sometimes develops into a neurotic, incidentally into a psychotic. Summarizing his results, Zvolský [15] indicated the prevalence of the syndrome 47 XXY with the diagnosis of psychosis in 0.54%. Orman et al. [7] and Nielsen [8] found depression in 25% of 28 patients with this syndrome. The estimated ratio of the syndrome among the psychiatric patients is 1 : 150. Among the psychic disorders phobia and anxiety prevailed. Sperber et al. [14] presented the hypothesis about an increased susceptibility to schizophrenia.

**Sexual life**

Nielsen et al. [9] claim that patients have less probability towards masturbation mechanisms in adolescence, towards sexual intercourse in marriage than a group of males of comparable age. With regard to sexual practices, the patients are sexually less active. Orman et al. [7] found this intensity of sexual life in 12 subjects. Hyposexual 9, normal sexual life 3, hypersexual 0. Partner relationship: 4 only hetero, 1 homo, 1 bisexual, 2 hetero-petting, no coitus, 3 only masturbation mechanisms, 1 impotence.

With regard to delinquency, according to Debray [5] it prevails in a more moderate form also in the sexual sphere. Potency is most often weakened, although total impotence is not the rule. Homosexuality does not occur more frequently than in the general population [1, 11]. As regards married life, the principal role is played by the female. Marriages with older females are more frequent. The relationship between married couples resembles the relationship between child and mother. The cause of divorce is usually disagreement in sexual life.

**Material and method**

The purpose of our research was the analysis of mental efficiency of personality characteristics and of the sexual life of patients. At the Sexology Outpatient Department and at the Department of Clinical Genetics, we examined 9 cases of