

RESULTS OF TREATMENT WITH TESTOSTERONE ENANTHATE IN 7 CASES OF MICROPENIS

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Introduction

Micropenis (M) is defined as a stretched penile length (SPL) 2.5 standard deviations (SD) below the mean for age or stage of sexual development without the presence of any other penile anomalies, such as hypospadias.¹ M has an incidence of 1.5/10.000 born and should be diagnosed immediately at birth. This condition may be idiopathic, associated with congenital malformations or deficient testosterone (T) secretion (hypergonadotropic or hypogonadotropic hypogonadism) and/or defects in T action.²

The aim of this study was to analyse the results obtained in terms of increased SPL in 7 children with idiopathic M treated with testosterone enanthate (TE).

Patients and Methods

7 children with M were evaluated at the Outpatient Clinic of Pediatric Endocrinology of the University of Siena in the last 2 years. The median age at diagnosis was 10.4 years (range 0.6-12.6). Clinical evaluation with measurements of SPL and testicular volume with Prader orchidometer was performed in all patients, in addition to assessment of FSH, LH, T, an-

drostenedione, 17hydroxyprogesterone, sex hormone binding globulin and bone age. Karyotype was performed only in two patients with suspected Klinefelter Syndrome (resulted XY). Treatment with TE at the median dose of 100 mg i.m. (range 25-100) once a month was started in all patients. The median length of therapy was 4 months (range 2-6).

Results

The diagnosis in all patients was idiopathic micropenis. The median SPL at diagnosis was 3 cm (range 2-3.5). The median SPL after TE therapy was 4.3 cm (range 3-7), with a median increase of 1.3 cm (range 0.3-3.7). No side effects as acceleration of growth velocity and skeletal maturation were observed.

Discussion

The best response to the administration of TE was observed in the patient of Moroccan origin treated at the age of 10.1 years who showed an increase in SPL of 3.7 cm. Also the child treated at the youngest age (7 months) showed an excellent response with an increase of 1.7 cm.

In accordance with the data reported in the literature, treatment with TE was effective in all our patients with idiopathic M.³ It is of crucial importance to recognize the condition at birth, in order to start treatment as soon as possible and to obtain clinically relevant results.

References

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