

SUMMARY

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Puberty is a term used for the biologic and physiologic changes associated with physical and sexual maturation.

There are changes in the reproductive organs and secondary sex characteristics, in body size, shape, in the relative proportions of muscles, fats, bones and other physiological functions(Tanner,1978).

The early clinical sign of the onset of puberty is the testicular enlargement due to growth of seminiferous tubules (Forfar and Arneil,1984).

There are some variation in the age at which signs of puberty begins and end, and in the sequence in which they occur. Several factors modify the time of puberty as genetic constitution, climate, light, and socioeconomic standard(Schonfeld,1943).

When the signs of puberty occur between 8th and 10th years, it is termed precocious puberty which is most commonly idiopathic(Jungek et al,1956). While delayed puberty is applied when the first secondary sexual characteristic appears after the age of 16 years. Delayed puberty is a common problem confronting the general practitioner. The great majority of patients are,in fact, perfectly normal and will eventually reach full adult stature and sexual development. The most common cause of delayed puberty is constitutional delay in growth which may be as late as 20 years(Labhart, 1974).

The onset of puberty is associated with changes in the levels of circulating gonadotropins and gonadal hormones(August et al,1972).

Testosterone is the principal androgen produced by the Leydig cells of the testes. This hormone stimulates the development of the male secondary sex characteristics(Lipsett and Korenman,1964).

Other hormones affect puberty to a lesser extent such as growth hormone, thyroxin,adrenal hormones and insulin(Williams,1981).

Prepubertal and pubertal obesity is less commonly associated with endocrine disorder, but the main cause is the high nutritional intake(Labhart,1974).

With the onset of puberty, there is increased incidence of varicocoele which is almost nil before puberty, increasing with pubertal development and stabilizing with the conclusion of puberty(Pozza et al,1983).

The more complex society becomes and the more rapidly it changes, the greater are the tasks facing an adolescent seeking an adult identity. There are many psychological disturbances facing adolescents such as reactive disorders, developmental deviation,psychoneurotic disturbances,personality disorder,brain syndrome and mental retardation(Schonfeld,1968).