

INTRODUCTION

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Paediatric endocrinology is a recent field of reseasch of which Fetal endocrinology is growing Faster.

Fetal growth seems to be a fairly smooth process, the rate tending to increase rapridly in early Fetal life and gradually diminish thereafter. Growth in weight increases rapidly at first, with gradual slowing which becomes progres- sively greater in the last six weeks of gestation. Linear growth is acceleratng, there is an inflection at roughly I4-I6 weeks and thereafter the rate of growth slowly diminishes in a decelerating Fashion. A growth spurt can be said to occur in linear growth, it is in the earliest stages of fetal life. Brain growth seems to have a pattern of its own and has a peak of neuronal growth at about 26 weeks and of glial tissue growth at term.

The discovery, that serum contains skeletal growth factor, different from GH, was termed sulphation factor by Salmon and Daughaday (1957). what was thought originally to be a single Factor, now turns out to be a Complicated series of substances called somatomedins.

Insulin might be a central factor in fetal growth, is suggested by studies of fetal hyperinsulinism, the classical overgrown fetus of the diabetic mother. Other rare disorders associated with fetal hyperinsulinism, such as the Beckwith-Wiedemann syndrome and insulinoma , are also characterised by fetal overgrowth, while hypoinsulinism, Such as seen in pancreatic agenesis results in fetal undergrowth (Birkbeck 1981).