We conducted a survey on the type of delivery in 118 patients with idiopathic growth hormone deficiencies (age range 4-18 years) and in 121 healthy control children.

Among the cases of hypopituitary dwarfism, 43 had isolated and 'total' growth hormone deficiency, 64 had isolated and 'partial' growth hormone deficiency (Priece and Tanner, 1976; Boscherini et al., 1978), and 11 had multiple pituitary trophic hormone deficiencies.

The incidence of breech delivery was much higher in patients with hypopituitary dwarfism (19.6%), than in the control group (1.6%) (Fisher's exact probability test: P<0.01). Moreover we observed that breech deliveries were slightly more common in patients with isolated and 'partial' growth hormone deficiencies, and were very common in patients with multiple pituitary trophic hormone deficiencies (Figure). The trend was significant when analysed by Armitage's $\chi^2$ test (P<0.01).

![Figure](image-url)

**Figure.** Incidence of breech delivery in patients with hypopituitary dwarfism. (A) Control group, (B) partial growth hormone deficiency, (C) total growth hormone deficiency, (D) multiple pituitary trophic hormone deficiency.

The high frequency of breech delivery in our patients and the close relationship between the frequency of podalic presentation and the severity of functional pituitary impairment support the view that breech delivery plays an important pathogenetic role in idiopathic hypopituitary dwarfism.

**References**


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**Paediatric Ophthalmology Study Group**

Sir,

This interdisciplinary study group on Paediatric Ophthalmology was founded by the late Dr Ronnie Mac Keith. It includes ophthalmologists, paediatricians, neurologists, psychologists, teachers, social workers, and others involved in the care of visually handicapped children. Its objectives are to further the knowledge of the subject, exchange ideas, and stimulate interest in this field to the eventual benefit of children who are visually handicapped. The group meets twice a year; in the autumn at the Newcomen Centre, Guy's Hospital, when formal papers followed by discussion are presented, and early in the year when visits are made to research units, special schools, or to any department concerned with the problems of paediatric ophthalmology. The present Convener is Dr Neil Gordon, Booth Hall Children's Hospital, and the organisation of the group is supported by the Spastics Society.

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