Abstract

Background- The clinical presentation of hypopituitarism is varied from asymptomatic to circulatory compromise. The late diagnosis may cause significant mortality and morbidity. There is scant data on the clinical profile.

Method- A cross-sectional descriptive analysis was carried out on diagnosed children with hypopituitarism at the endocrinology unit of Lady Ridgeway hospital for children- Sri Lanka, from 2013- 2021. The presence and progression of pituitary hormonal deficiency were ascertained.

Results – Out of the total 94 children with hypopituitarism, 52 had congenital hypopituitarism with a median presenting age of 5.86 years (IQR 3-9). Short stature was the commonest presentation (59.6%). Multiple pituitary hormone deficiency (MPHD) was seen in 27(51.91%). MPHD was associated with the presence of post-natal risk factors (OR 2.036, 95% CI 1.94-3.786) and MRI Imaging abnormalities in hypothalamic-pituitary morphogenesis (OR 1.768, 95% CI 1.087-2.874). 90.4% with GHD,46.2% with ACTH deficiency, and 40.4% with TSH deficiency had the mean age of presentation 6.54 years, 6.11 years, and 5.56 years respectively. Of the children above 13years, 57% showed hypogonadism. Hypoplastic anterior pituitary (40.4%) was the commonest MRI abnormality.

Out of the 42 children with brain tumors, 25(59.52%) had Craniopharyngioma and 13 (31%) had Medulloblastoma while MPHD was seen in 32 (76.2%). Hormone deficiency at the presentation was seen in 57.1%.

Conclusion- Comprehensive evaluation and periodic screening are mandatory for the timely diagnosis of MPHD.

Keywords- Multiple Pituitary Hormone Deficiency; neonatal risk factors; Brain imaging; Brain Tumors; Radiotherapy.