

Supplementary Materials:

Supplementary Table S1. Demographic and endo-metabolic data in patients presenting with diencephalic syndrome vs those without diencephalic syndrome.

| Factors and categories | Diencephalic Syndrome | | <i>p</i> value |
|---|--------------------------------|--------------------------|-------------------------------|
| | Yes n=27 | No n=63 | |
| AT DIAGNOSIS | | | |
| Gender male | 10 (37.0) | 32 (50.8) | 0.231 |
| Age (years) | 0.84 [0.50 – 1.90] (0.25-2.90) | | 2.00[1.20 – 2.60] (0.06-3.00) |
| Age ≤1 year | 18 (66.7) | 12 (19) | <0.0001 |
| NF1 | 1 (3.7) | 26 (41.3) | <0.0001 |
| Radiological Classification | | | |
| MDC 1 | 0 (0) | 19 (30.2) | 0.001 |
| MDC 2 | 4 (14.8) | 21 (33.3) | 0.072 |
| MDC 3/4 | 23 (85.2) | 23 (36.5) | <0.0001 |
| Hypothalamic involvement | 27 (100) | 29 (46) | <0.0001 |
| Leptomeningeal Metastases | 9 (33.3) | 2 (3.2) | <0.0001 |
| Visual symptoms at diagnosis | 12 (44.4) | 29 (46) | 0.890 |
| Raised intracranial pressure at diagnosis | 10 (37) | 12 (19) | 0.069 |
| AT LATEST FOLLOW UP | | | |
| Presence of endo-metabolic disorders | 23 (85.2) | 29 (46) | 0.001 |
| M-EMS(score 0-10) | 2 [1 – 5] (0 – 7) | 0 [0 – 3] (0 – 7) | 0.002 |
| APD | 21 (77.8) | 26 (41.3) | 0.001 |
| GHD* | 16 (59.3) | 21 (33.3) | 0.022 |
| TSHD* | 11 (40.7) | 10 (15.9) | 0.011 |
| ACTHD* | 9 (33.3) | 10 (15.9) | 0.063 |
| CPP* | 14 (51.9) | 10 (15.9) | <0.0001 |
| GnD* | 8 (29.6) | 9 (14.3) | 0.088 |
| PPD | 6 (22.2) | 9 (14.3) | 0.355 |
| CDI* | 2 (7.4) | 6 (9.5) | 1.000 |
| SIADH* | 4 (14.8) | 6 (9.5) | 0.479 |
| CSWS* | 1 (3.7) | 0 (0) | |
| MD | 11 (40.7) | 12 (19) | 0.031 |
| Obesity* | 11 (40.7) | 12 (19) | 0.031 |
| IGT/T2DM* | 4 (14.8) | 7 (11.1) | 0.623 |
| Follow-up time (years) | 9.3 [3.6 – 15] (1.13-21.74) | 9.9 [4 – 11.9] (0.52-25) | 0.812 |
| Deceased | 5 (18.5) | 4 (6.3) | 0.121 |

Categorical variables are reported as number and percentage. Continuous nonparametric variables are presented as median [interquartile range] (range).

*Items of the Modified Endocrine Morbidity Score (M-EMS)

M-EMS: Modified Endocrine Morbidity Score; APD: Anterior Pituitary Dysfunction; GHD; Growth Hormone Deficiency; TSHD: TSH Deficiency; ACTHD: ACTH Deficiency; CPP: Central Precocious Puberty; GnD: Gonadotropin Deficiency; PPD: Posterior Pituitary Dysfunction; CDI: Central Diabetes Insipidus;

SIADH: Syndrome of Inappropriate Secretion for ADH; CSWS: Cerebral Salt Wasting Syndrome; IGT: Impaired Glucose Tolerance, T2DM: Type 2 Diabetes Mellitus.