

was a prospective, single centre observational study conducted among inpatients with EvHNa. EvHNa was defined as patients with a serum sodium (Na) <135 mEq/L, with no clinical evidence of dehydration or fluid excess, and a urine spot Na >30mmol/L. In addition patients with recent vomiting, renal failure, recent diuretic use, uncontrolled hyperglycemia and patients with history of use of oral or parenteral steroids in the last 6 months were excluded. Adrenal functions were assessed by a modified porcine ACTH stimulation test which has been described recently by Nair et al. A cut off cortisol value of <18mg/dl after 60 minutes of ACTH injection was used to diagnose AI.³ **Results-** One hundred and forty one (141) patients were included after informed consent and all underwent a modified ACTH stimulation test. They had a mean age of 58 years and 52.3% (n=74) were males. Modified ACTH stimulation testing suggested 20/141 (14.2%) had undiagnosed AI. The mean age among those with AI was 55.2 years. In only 25% (5/20) AI was suspected based on clinical presentation by the treating physician. Despite excluding patients with documented steroid use, the commonest cause of AI (9/20) was secondary AI due to exogenous steroid use including high potency inhaled steroids (5/9) and the use of undocumented steroids or steroid containing medicaments by alternative practitioners (4/9). Hypopituitarism was diagnosed as the cause of AI in 5 patients, which included unsuspected Sheehan's syndrome in post menopausal women (3/5), non functioning pituitary adenoma (1/5) and lymphocytic hypophysitis (1/5). Despite primary AI not commonly presenting as EvHNa, 3/20 patients had primary AI and in the remaining 3 patients the aetiology of AI remained unclear. **Conclusions-** Undiagnosed AI is much more common in our country among inpatients presenting with EvHNa to medical units. This increase is primarily driven by inhaled and undocumented exogenous steroid use and undiagnosed Sheehan's syndrome. An assessment of the hypothalamic-pituitary-adrenal axis is mandatory before making a diagnosis of SIADH. **References** -(1) Diederich et al. *Eur J Endocrinol* 2003; 148: 609-617. (2) Cuesta et al. *Clin Endocrinol (Oxf)* 2016; 85: 836-844. (3) Nair A et al. *Eur J Endocrinol*. 2019 Oct 1. pii: EJE-19-0558.R2.

Adrenal

ADRENAL - TUMORS

Adrenal Incidentalomas: Pattern of Referral According to Clinical Specialty

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SAT-161

Whilst the estimated prevalence of adrenal incidentaloma is 0.5-2% following abdominal CT scan (1), little is known about subsequent endocrine referral patterns according to clinical specialty. We therefore examined the range

of specialties that were responsible for requesting CT and MRI scans that led to reporting potential adrenal lesions. We also explored the referral pattern to endocrinology following identification. We extracted data from all radiology reports for all CT and MRI scans from Jan 2018-Oct 2019. We utilised a key phrase search strategy (eg adrenal adenoma/lesion/mass/nodule/incidentaloma, incidental adrenal, indeterminate adrenal). Where possible we excluded false hits (eg no adrenal lesion). These were lined to the referral patterns as identified by a referral logged or an attendance (new or follow-up) to endocrine clinic 3 months post index scan. These data were stratified by requesting specialty. Preliminary data showed that, out of 127878 scans, 2021 patients were identified to have a potential adrenal incidentaloma. These requests came from a total of 45 different clinical specialties (medical and surgical). The top 12 specialties accounted for 82.8% of these referrals. Medical specialties (renal, gastroenterology, respiratory, general medicine, acute medicine and geriatric medicine) accounted for 50.2%. The remaining 32.6% were via surgical specialties. The overall referral pattern in these cases was 8.5% with no difference between medical (8.6%) and surgical (8.4%) specialties. In conclusion, adrenal incidentalomas are potentially identifiable across a wide range of specialties. Currently, despite a dedicated adrenal multidisciplinary team and nationally-acknowledged quality improvement programme for the management of adrenal incidentalomas (2), the majority of cases are overlooked and not referred for endocrine review as suggested in current guidelines. We expect the findings in our centre to be reproducible elsewhere. We are considering innovative approaches to improve the process and cope with the additional workload cost-effectively. 1. Barzon L, Sonino N, Fallo F, Palu G, Boscaro M. Prevalence and natural history of adrenal incidentalomas. *Eur J Endocrinol*. 2003;149:273-285. Hanna FWF, Issa BG, Lea SC, George C, Golash A, Firn M, Ogunmekan S, Maddock E, Sim J, Xydopoulos G, Fordham R, Fryer AA. Adrenal lesions found incidentally: how to improve clinical and cost-effectiveness. *BMJ Open Quality*. 2019;In press.

Neuroendocrinology and Pituitary

CASE REPORTS IN SECRETORY PITUITARY PATHOLOGIES, THEIR TREATMENTS AND OUTCOMES

A Rare Case of Functioning Gonadotroph Producing Pituitary Macroadenoma in Teenage Male

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SAT-269

Background: Unlike nonfunctioning gonadotroph pituitary adenomas, functioning gonadotroph pituitary adenomas (FGA) are an uncommon type of pituitary tumors that secrete biologically active gonadotropins (LH, FSH, or both).

Clinical Case: A 23-year-old man with no previous medical history presented to the emergency department with three