~~P10.30~~

~~An analysis of incidence and characteristics of Cushing's syndrome in Malta: a population based study~~

~~*M. Giordano Imbroll, A.G. Abela, J. Vassallo, M. Gruppetta*~~

~~*Department of Medicine, Faculty of Medicine and Surgery, University of Malta, Msida, Malta; Mater Dei Hospital, Msida, Malta*~~

~~**Introduction:** There are few reports discussing incidence and characteristics of the whole group of Cushing's syndrome patients in the literature. The aim was to establish the incidence of endogenous Cushing's syndrome with in-depth analysis of their various subtypes in a well-defined population.~~

~~**Methods:** Retrospective cross-sectional analysis of Cushing's syndrome patients diagnosed between 2008 and 2017. A thorough search for patients was carried out in the central hospital registries including outpatients departments, surgical registries, radiological department and specialty clinic databases.~~

~~**Results:** Twenty six patients were identified as diagnosed with Cushing's syndrome over the 10 year period equating to a standardised incidence rate (SIR) of 4.6/1,000,000/yr with an almost equal SIR among males and females. Analysing the various subtypes of Cushing's syndrome, the majority (*n*=13) were due to an ACTH secreting pituitary adenoma (SIR 2.5/1,000,000/yr). In this subtype males had a SIR of 3.3/1,000,000/yr compared to 1.7/1,000,000/yr in females. ACTH independent Cushing's had a SIR of 1.8/1,000,000/yr with a strong female predominance (9:1) (SIR females: 3.0/1,000,000/yr; males: 0.5/1,000,000/yr). The SIR of ectopic ACTH secreting tumours was 0.4/1,000,000/yr. Interestingly hypokalaemia was present at diagnosis in those patients who harboured malignant causes for their Cushing's syndrome (ectopic ACTH secreting tumours or adrenocortical carcinomas) and had markedly elevated cortisol levels compared to the rest (*P*<0.001). Mean ACTH values for Cushing's disease patients was 110.4 (+/- 77.2 SD) pg/ml while in the ACTH independent group was 5.5 (+/- 4.7 SD) pg/ml (*P*<0.001).~~

~~**Conclusion:** Cushing's syndrome is a rare disease. Although the numbers are small, we could still establish distinct characteristics in the different subtypes.~~

P10.31

Diabetic patient self-monitoring

J. Zarb, F. Wirth, L.M. Azzopardi

Department of Pharmacy, Faculty of Medicine and Surgery, University of Malta, Msida, Malta

Introduction: The aims are to investigate the perception of patients with type 1 diabetes mellitus (T1DM) regarding self-monitoring of blood glucose (SMBG) and continuous glucose monitoring (CGM) and to identify problems encountered when carrying out BG monitoring.

Methods: A questionnaire on SMBG developed in English and Maltese and validated in a previous study by Cassar (2009) was updated with the inclusion of a section on CGM. The questionnaire is anonymous and completed via semi-structured interview. One hundred T1DM patients ?18 years are recruited by convenience sampling from 15 community pharmacies.

Results: Preliminary findings from 10 patients (7 female, mean age 50 years, 7 educated to secondary level, 7 with duration of T1DM 5 years) show that SMBG is performed only once daily in 5 patients, more than once daily in 4 patients, and only when experiencing hypoglycaemia symptoms in 1 patient. Most frequent problems encountered with SMBG are painful finger pricking (*n*=7), high cost of buying extra test strips (*n*=5) and lancets (*n*=5), need for frequent testing (*n*=5), and time restrictions in busy schedule (*n*=5). No patients use a CGM device, however 5 patients have heard of CGM. Reasons for not using CGM are need for more awareness (*n*=7) and cost (*n*=3). Seven patients are willing to start using CGM, with 5 patients only willing if the CGM device is made available free-of-charge through the National Health Service.

Conclusion: Improving awareness and access to CGM is warranted to overcome self-monitoring problems identified, such as painful frequent finger pricking. Reference : Cassar J. Diabetic patient management [project]. Msida (Malta): Department of Pharmacy, University of Malta; 2009.