**BACKGROUND**

- There is currently limited evidence supporting the role of screening for Cushing’s Syndrome (CS) in the context of weight management patients.
- Patients referred to the specialist weight management service at Musgrove Park Hospital are routinely screened for CS with a 1mg overnight dexamethasone suppression test (ODST), or two 24 hour urinary free cortisol collections (UFC) if they are dysglycaemic (known diabetes or impaired glucose tolerance).

**AIMS**

- To quantify the number of patients with positive CS screening results
- To quantify the number of patients subsequently diagnosed with CS or cortisol dysregulation

**METHODS**

- A retrospective review of all patients referred to the tier 3 weight management service at Musgrove Park Hospital in 2013 to 2016.
- Patients were excluded if they met our exclusion criteria (Table 1).
- Data on patients’ weight, BMI, diabetic status, ODST/UFC results were obtained from clinic letters.
- A positive CS screening result was defined as either: a 9am cortisol >50nmol/L, or 2 x UFC > upper limit of normal.
- Statistical analysis was conducted following data collection.

**RESULTS**

- 1033 patients were referred to weight management services.
- 534 (51.7%) were included in data analysis (Figure 1).
- No patients were diagnosed with CS in this cohort.
- All patients with abnormal ODST/UFC results either had normal repeat results or were not clinically deemed to have cortisol excess (Figure 2).

**DISCUSSION**

- This study contains the largest reported data set addressing CS screening in the context of weight management services.
- Our results are in keeping with a prospective study of 369 patients screened for CS in a weight management program in the United States.[1]
- Our data suggests that routine screening for CS is not warranted in all patients referred for weight management support.
- Biochemical suggestion of cortisol dysregulation was discounted in 5 patients by clinical correlation. These abnormal results were felt to be related to other factors such as poor glycaemic control.
- The mean BMI of patients in the European Cushing’s Registry is 28±9 kg/m² - which is much less than our cohort (46.6 ±7.8 kg/m²).[2] If CS was the cause for obesity in our cohort, then it might be expected that other features of CS would have been clinically apparent.
- Patients with clinical evidence of CS should still undergo appropriate investigations.

**REFERENCES**