

## P307

### P307 -Changes in Body Mass Index (BMI) in patients with ANCA Associated Vasculitis (AAV) following initiation of induction therapy: a single centre cohort study

**Miss Lydia Isted<sup>2</sup>, Mr Samuel Wilding<sup>2</sup>, Dr Nina Brown<sup>1</sup>**

<sup>1</sup>Salford Royal Foundation Trust, Salford, United Kingdom, <sup>2</sup>University of Manchester, Manchester, United Kingdom

**Introduction:** ANCA-associated vasculitis (AAV) currently requires high dose corticosteroids as part of induction therapy. Side effects of steroids are numerous including bone disease, infection and metabolic disturbance. One of the commonest reported side effects by patients following steroid exposure is weight gain, affecting cardiovascular risk as well as body image but with little data available in this area. We therefore sought to assess the change in BMI in this population over 12 months, following induction therapy for new disease, or disease flare in AAV.

**Methods:** This is a single centre retrospective cohort study. Data for 46 subjects was collected from patients attending a renal unit with a diagnosis of AAV requiring induction therapy between June 2014 and October 2017. Patients were treated with either Rituximab or cyclophosphamide with accompanying corticosteroid dosing as per EUVAS protocols, unless clinically indicated. BMI data was collected at onset of therapy, 6, and 12 months and compared.

**Results:** The subjects had a near equal split of men (52%) and women (48%) with a mean age of 69 ( $\pm 20.3$ ) years. Mean BMI at commencement of therapy was 27.5 ( $\pm 7.5$ ) kg/m<sup>2</sup>.

Mean BMI at 6 months was 27.8 ( $\pm 8.6$ ) and at 12 months 28.2 ( $\pm 7.0$ ). One year following treatment initiation, 47.8% had an increase in BMI (36.4% of whom went from a healthy to overweight BMI), 28.3% had a decrease and 8.7% had no change. 15.2% of patients did not have full BMI recordings for comparison.

**Conclusion:** A large number of patients receiving induction treatment for AAV gain weight over the following 12 months. Some of this may reflect a return to base weight following regain of weight lost through initial illness. However, for a substantial proportion this resulted in them obtaining an “overweight” BMI. It is well established that patients with AAV have an augmented cardiovascular risk, therefore this weight gain is not insignificant. Further data from this population is required in order to better inform how we can prospectively advise this patient group. We plan to collect further longitudinal data from this population to help us to design appropriate intervention such as dietary and lifestyle counselling prior to initiation of therapy.