

European Respiratory Society Annual Congress 2013

Abstract Number: 4203
Publication Number: P835

Abstract Group: 5.2. Monitoring Airway Disease

Keyword 1: Asthma - management **Keyword 2:** Chronic disease **Keyword 3:** Inflammation

Title: Treating peripheral eosinophilia in asthma: Simple and effective

Dr. Ding 26825 Yew dwyew@hotmail.com MD ¹, Dr. Kimberly 26826 Su kimberleysu@yahoo.co.uk MD ¹, Dr. Rajesh 26827 Yadavilli dryadavilli@hotmail.com MD ¹, Dr. Mithun 26828 Murthy mithunmurthy79@yahoo.com MD ¹ and Dr. Hassan 26838 Burhan hassan.burhan@rlbuht.nhs.uk MD ¹. ¹ Respiratory Medicine, Royal Liverpool University Hospital, Liverpool, United Kingdom, L7 8XP .

Body: Background: Escalating steroid treatment in asthma based on sputum eosinophilia has been shown to reduce admissions. While sputum cell counting is not practical in all patients, increasing steroid treatment in those asthmatic patients with peripheral eosinophilia is straight forward. We assessed our patient database to see whether those patients with eosinophilia were prescribed more steroid and whether this led to better control. Methods: A retrospective analysis of 100 patients from a dedicated asthma clinic, using case note review, spirometry results, serum eosinophils and total IgE, mini Asthma Quality of Life Questionnaire (AQLQ) and Asthma Control Test (ACT) questionnaire results was carried out. Hypothesis testing using two-way unpaired student's t test for continuous variables and z-test for proportions. Results: The mean age of our asthmatic population was 49.3years, 77% were female. A significantly greater proportion of patients with blood eosinophilia were on maintenance oral corticosteroids.

Table 1

Parameter	Blood Eosinophils ≥ 0.5 (N=20)	Blood Eosinophils < 0.5 (N=80)	p- value
Blood Eosinophils (Mean)	0.75	0.21	NA
BMI (Mean)	31.98	29.6	0.23
Total IgE (Mean)	373.4	210.2	0.13
AQLQ (Mean)	3.66	3.77	0.77
ACT (Mean)	13.26	13.15	0.93
FEV1% (Mean)	73.6	84.7	0.10
Asthma Admissions in preceding yr (Mean)	1.25	0.96	0.17
BTS step (Mean)	3.95	3.57	0.06
Proportion on Step 5 treatment (%)	45	20	0.01

Conclusions: Patients with a blood eosinophilia tend to be on higher BTS Step treatment and a significantly greater portion are on maintenance oral corticosteroids. Perhaps as a consequence of this, there are no significant differences between those with and without eosinophilia with regards to BMI, QoL, control or FEV₁ % predicted.