PRISMS: A SYSTEMATIC REVIEW OF THE MRC ‘PHASE IV’ EVIDENCE ON IMPLEMENTING ASTHMA SELF-MANAGEMENT

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Objective To determine if specific clinical questions could reliably predict the ultimate inflammatory phenotype of patients attending a severe asthma service. The severe asthma clinic at University Hospital of South Manchester now routinely ask the desert island question (DIQ)..... “If you were on a desert island and could only have steroids or antibiotics which would you choose?”

Background It is widely accepted that asthma is the result of complex pathological processes giving rise to a variety of different phenotypes, including eosinophilic and non-eosinophilic inflammatory patterns. Phenotype is determined by investigations e.g. baseline blood/sputum eosinophil level and clinical response to treatments including steroid augmentation/withdrawal. Investigations include antibody status to Haemophilus Influenza and Streptococcus Pneumonia.

Method New patients referred to the severe asthma service were asked the DIQ during their first appointment, prior to any investigations. We collected data from first clinic letters and case notes. Data collected included DIQ answer, phenotype, additional diagnoses, historical steroid and antibiotic use, sputum data and all asthma treatments trialled.

Results A total of 59 patients were identified. 71% answered steroids and 29% answered antibiotics. Of those that answered steroids, 83% had eosinophilic asthma, 14% had non-eosinophilic asthma. The breakdown of the different phenotypes within the different answer groups is illustrated in Figure 1. The positive predictive value (PPV) of the answer “steroids” was 86% and “antibiotics” 47% ($\chi^2=7.182$ p $<0.01$). 67% of the “antibiotic” answers and 38% of the “steroid” answers were found to be antibody deficient (Haemophilus Influenza and/or Streptococcus Pneumonia). 30% who answered “antibiotics” were on maintenance steroids compared to 41% of patients who answered “steroids”. Conclusion This small pragmatic study has shown that the answer “steroids” to the DIQ has a high PPV for eosinophilic airway inflammation. The “antibiotic” response is much less useful in predicting inflammatory phenotype, but it does identify a high likelihood of antibody deficiency.

WHICH SECONDARY CARE ASTHMA PATIENTS ARE MOST LIKELY TO OVERESTIMATE THEIR CONTROL? A CROSS-SECTIONAL STUDY

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Introduction Asthma is a global health issue affecting 300 million people worldwide; with increasing prevalence and morbidity and preventable mortality. Despite advances in management the number of asthma related deaths has not improved.