Health Technology Appraisal

Corticosteroids for the treatment of chronic asthma in adults and children aged 12 years and over

Appraisal Consultation Document

Asthma and Allergy Research Group

- Sestion 2.2 : With regard to diagnosis of asthma ,no mention is made wrt disconnect which is often found between airway calibre and the underlying inflammatory process ,and in particular airway hyperresponsiveness –ie patients may have normal values for FEV1 and PEF but have evidence of bronchoconstriction on challenge –eg with exercise ,allergen or non specific agents like histamine or methacholine or mannitol .
- Section 3.5 : According to the BNF, breath actuated pMDI's are NOT more expensive than ordinary pMDI –eg comparing generic BDP as Beclazone pMDI to Beclazone Easibreathe ,or comparing Qvar to Qvar Easibreathe or Autohaler .For this reason it makes sense to always prescribe a breath actuated pMDI for BDP as there is no cost difference .
- Section 4.1.11 –I would refer to Gibson et al JACI 2007:119:344, which in an meta-analysis of 20 RCTs of 4312 patients showed no significant benefit on severe exacerbations [defined by need for oral steroids] by adding LABA to higher dose of ICS or to a similar dose in steroid naïve patients ,but only conferred significant benefit when LABA was added to same pre-existing dose of ICS [NNT =18] .The summary as stated is not supported by the data from meta-analysis wrt severe exacerbations for adding LABA to a higher dose of ICS .
- 4.3.5 The point has been missed here that for a given ICS the systemic adverse effects are dependent on the fine particle dose from the formulation –eg for FP there is a 5 fold difference in lung bioavailability when comparing FP via DPI vs FP via pMDI plus spacer [Wilson Lancet 1999;353:2128;Martin AJRCCM 2002;165: 1377].
- Also in 4.3.5 the point is missed that for FP the absorption from the lung is largely determined by airway calibre ,such that more severe patients are relatively protected from systemic adverse effects [Lee Ann Allergy Asthma Immunol 2004:93:253] –ie it is the unique interaction between the device and the patient that will be the major determinant of systemic effects –eg someone taking FP 2000ug via DPI with FEV1 of 50% will be very unlikely to develop systemic adverse effects ,but a patient taking FP 500ug via pMDI plus spacer with FEV1 of 90% will be at much greater risk .