Methods: Data analysed from twenty- two admissions coded as acute asthma exacerbation. Data collected using a proforma provided by BTS.

Results: Compliance via documentation of an asthma management plan was inadequate especially for admissions under a non- respiratory paediatrician. Confirmation of recording for inhaler technique and provision of information leaflets were better. Most children admitted had a chest x-ray, a majority of which were inappropriate. A minority of children discharged had hospital follow- up (mostly to a paediatric respiratory physician).

Conclusions:

1. Compliance with BTS guidelines for initial management of paediatric acute asthma was good (i.e. patient assessment and stabilisation). However, very few patients received an asthma management plan- 27%.

2. Outcomes should improve by adopting and implementing a within- department 'tick-box' proforma to include an asthma plan, efficiency of inhaler technique, asthma prophylaxis and follow-up arrangements.

3. A repeat audit is planned in six months.

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AUDIT OF THE USE OF A WRITTEN ASTHMA ACTION PLAN IN A BUSY PEDIATRIC UNIT

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Background and aims: A written action plan (WAP) is recommended for all patients with asthma, particularly those who have moderate or severe exacerbations, frequent or poorly controlled asthma.

Our hospital introduced a new WAP 1 year ago, which we are now auditing. The WAP should be provided to all pediatric asthma patients on discharge.

Methods: A retrospective audit was carried out identifying all asthmatic patients admitted to the pediatric ward during November 2009. Patient's notes were pulled and checked for the presence of a WAP. When a WAP was present it was assessed for completeness using a questionnaire.

Results: 29 asthmatic patients were discharged from the pediatric ward from 1st through 30th November.

20 of these admissions were with asthma, 1 patient was admitted twice. A WAP was identified in 3 of the patients' charts. The WAP was complete in 1 case and incomplete in 2 cases. In an additional 3 cases the nursing staff documented that the patient was discharged home with a WAP, although a copy of the WAP was not found in the notes.

Conclusions: The BTS guidelines for the management of asthma, including provision of a WAP for all patients with moderate to severe asthma, should be reviewed with each new group of doctors biannually. The WAP, the patient's notes and the kardex should state which asthma medications the patient is taking and their doses. The dose of rescue steroids for home use should be stated on the WAP if prescribed.

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ASTHMA AND ASSOCIATED ATOPIC DISEASES IN CHILDREN

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Objective: To evaluate clinical characteristics of asthma and asthma's association with other atopic diseases: allergic rhinitis (AR), allergic conjunctivitis (AC), and atopic dermatitis.

Methods: One hundred children with asthma (not hospitalized) were included in the study starting from 2006 until 2009. The Asthma was diagnosed using GINA criteria and allergic rhinitis by ARIA recommendations. Anamnestic data, clinical findings, as well as routine and specific examinations were also used in the study.

Results: The average age of children with asthma was 11.76 $\pm$ 0.09. Thirty percent of children who participated in the study had intermittent asthma. 66% percent had mild and moderate persistent asthma, and four percent of children had severe persistent asthma. 60% of children with asthma had allergic rhinitis. Intermittent AR was diagnosed in 12/60 children with asthma, and 50% of them had moderate severe allergic rhinitis.

Persistent AR was diagnosed in 48/60 children and 35% of them had moderate severe persistent AR. All children with severe persistent asthma (AS) had moderate severe persistent AR as well. The leading symptoms in children with AR were sneezing, nasal obstruction, nasal secretion, and coughing. 52%

of children with AS had atopic dermatitis. Allergic conjunctivitis was associated with AS in 20% of the children who participated in the study, and 33% of children with AR had AC as well.

Conclusion: AR, AC, and eczema are in comorbidity with asthma and it is necessary to identify and treat them on time, so that better control of asthma is achieved. Our study shows that both AS and AR coexist in high frequency, which points out the relationship between upper and lower airways. Therefore, potential concept of associated airway diseases should be considered.

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CLINICAL AND ECONOMIC IMPACT OF A PARTIALLY HYDROLYZED FORMULA IN THE PREVENTION OF ATOPIC DERMATITIS IN FRENCH CHILDREN

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Background and aims: A pharmacoeconomic analysis was performed to determine costs and consequences of NIDAL EXCEL HA, a specific brand of partially hydrolyzed formula (PHF), in the prevention of atopic dermatitis (AD) in “at risk” children when compared to standard cow’s milk formula (CMF) in France. A secondary analysis was undertaken in comparison to extensively hydrolyzed formula (EHF) although this latter is not officially indicated in prevention.

Methods: An economic model depicting AD treatment pathways, as well as resource utilization and associated costs, analysed the use of PHF in healthy yet “at risk” French newborns who were not exclusively breastfed. Inputs were gathered from the literature, official formularies and expert opinion for a 12-month time horizon, including six months formula consumption by newborns. The treatment pathways included dietary management approach (formula change), medical treatment approach (corticosteroid use) and a combination thereof. The final outcome was the expected incremental cost per avoided AD case for PHF in comparison to other formulas.

Results: For the 2009 birth cohort, 7,120 AD cases would be avoided by selecting PHF over CMF, with formula costs of € 76.5 million and € 67.9 million, respectively, resulting for society in € 1,210 per avoided case by PHF. PHF demonstrated cost savings when compared to EHF (approximately € 50 million) due to similar efficacy in preventing AD and lower cost.

Conclusions: PHF appears to be the product best positioned in prevention at a reasonable cost when compared to CMF and with a cost saving when compared to EHF.

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CLINICAL AND ECONOMIC IMPACT OF A PARTIALLY HYDROLYZED FORMULA IN THE PREVENTION OF ATOPIC DERMATITIS IN SPANISH CHILDREN

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Background and aims: The costs and consequences of NIDAL EXCEL HA, a specific brand of partially hydrolyzed formula (PHF), were determined in the prevention of atopic dermatitis (AD) for “at risk” children when compared to standard cow’s milk formula (CMF) in Spain. Although extensively hydrolyzed formula (EHF) is not officially indicated in prevention, a secondary analysis compared PHF to EHF.

Methods: The treatment pathways of AD, as well as resource utilization and associated costs, were synthesized into an economic model analysing the use of PHF in healthy yet “at risk” Spanish newborns who were not exclusively breastfed. Inputs were obtained from the literature, official formularies and expert opinion for a 12-month time horizon, with an initial six months of formula consumption. Treatment pathways included dietary management approach (formula change), medical treatment approach (corticosteroid use) and a combination thereof. The final outcome was the expected incremental cost per avoided AD case for PHF vs. the other formulas.