A COMPARATIVE STUDY OF CLINICAL PROFILE AND VIRTUAL PAEDIATRIC CLINIC IN SPECIAL NEEDS SCHOOL AGE CHILDREN WITH MILD PERSISTENT ASTHMA

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Background Bronchial asthma and obesity show a parallel increase in prevalence of late. Obese children with asthma have been shown to have lower disease control and increased symptom severity compared to normal weight asthmatics. There has been a dearth of studies related to asthma in obese and overweight children in India.

Objectives To find out the proportion of children with poor symptom control in overweight/obese and normal weight children with mild persistent asthma and to know the socio-demographic and clinical correlates of poor symptom control in them.

Methods Children aged 6 to 12 years with mild persistent asthma with BMI Z score for age and sex more than +1 Z score on WHO BMI Z score chart for age and sex formed the cases. Age and sex matched asthmatics with BMI Z score for age and sex between -2 Z to +1 Z score formed the controls. A brief, relevant history and respiratory examination was carried out in them. FEV1, FEV1/FVC were measured in both groups using Care Fusion Jaeger spirometer. Symptom control was assessed by ACT score and we also looked at inhaler device technique. Statistical analysis was done using SPSS version 19 and Vassarstats.

Results Our study population consisted of predominantly males hailing from rural areas. Parental atopy was found in equal proportions among both cases and controls. All the children in the overweight/obese group showed good compliance to therapy. The proportion of children with poor control was 19.1% in the overweight/obese group and 23.4% in the normal weight group. There was no significant correlation between BMI and symptom control as assessed by ACT score. The lung function tests performed in our study population revealed a mean FEV1 (% of predicted) of around 75% in both the groups in children with good control. This relates to the mild obstructive lung dysfunction in our study population. For those children with poor control, the mean FEV1 (% of predicted) was around 67% in both the groups. Overweight/obese children with good control showed a slightly lower predicted) was around 67% in both the groups. Overweight/obese children with good control showed a slightly lower FEV1/FVC ratio compared to children with normal weight. Overweight/obese children also had a slightly higher median eosinophil count compared to children with normal weight. Gastro-oesophageal reflux and allergic rhinitis were more commonly seen in overweight/obese children. In the poor control group, FEV1, FEV1/FVC and median eosinophil counts were not significantly different between overweight/obese and normal weight group, but was less when compared to good control group.

Conclusions The proportion of poor symptom control in overweight/obese children with mild persistent asthma is not significantly different when compared to normal weight children with mild persistent asthma as assessed by ACT score and lung function measurements. No significant risk factors for poor symptom control could be identified in both overweight/obese group as well as normal weight group in our study.

Abstract 298 Table 1 Comparison of symptom control in the study groups

| Symptom control          | Overweight/Obese (n=47) | Normal weight (n=47) | P value* |
|--------------------------|-------------------------|---------------------|---------|
| Good control (ACT>20)    | 38                      | 36                  | 0.25    |
| Poor control (ACT<20)    | 9                       | 11                  | 0.065   |

*P value calculated using Chi square test

Abstract 302 Table 1 Comments made by parents

| Parental Experience of virtual clinics | Comments made by parents |
|---------------------------------------|--------------------------|
| 1. Doctor listens and gives good advice The centre is really helping and give a great follow up to parents of children with disabilities Be reassured that everything will be ok |
| 2. Everyone has been extremely helpful during this situation. I cannot fault a single thing. |
| 3. We discussed different elements of my daughter’s needs and agreed on a plan going forward, I felt included and that I mattered in the decision making process |
| 4. Overall the Nursing Team and the Paediatrician have been very supportive over the lockdown. |
| 5. I thought it was great idea. I had to cancel at short notice waiting for another time but we have no issues so I’m not chasing. |

Abstract 302 VIRTUAL PAEDIATRIC CLINIC IN SPECIAL NEEDS SCHOOL - IS THAT RIGHT FOR MY CHILD?

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Background Community pediatric services at Bedford, UK offers clinical support to all 3 local special needs schools. A multidisciplinary clinic with a paediatrician and special needs nursing team takes place once a week, and with child and adolescent mental health services team once in 6–8 weeks at the school sites. However, because of COVID-19 pandemic all schools closed in March 2020 and we had to stop face to face clinics. We converted these clinics into initially telephone and subsequently either telephone/video consultations.

Objectives The objective of our study was to assess how parents of children and young people (CYP) with special needs feel about this transition to virtual clinics.

Methods CYP attending special schools in Bedford, who are under the care of community paediatricians (n=397), were selected for the study. Parents of children, who were seen in virtual clinics between 01/07/2020 and 31/10/2020, were approached for feedback (n=110). This was part of a wider survey related to these children’s anxiety and emotional difficulties during lock-down. A link to the questionnaire was sent to parents’ phone/Email after explaining the study and obtaining verbal consent. All responses were recorded in the IQVIA Connection survey website (https://www.oc-meridian.com/cambsCommunityServices). No sensitive or personal identifiable data were used.

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