

1.05 Review Of Use Of Biologics In Children With Severe Asthma- A Single Centre Experience

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Background: Severe asthma is defined as asthma that is uncontrolled despite adherence with maximal optimised treatment with correct inhaler technique and management of contributory factors such as comorbidities and environment exposures, or that worsens when high dose treatment is reduced (1). Severe asthma in children accounts for less than 5% of all childhood asthma cases, yet it can cause frequent asthma attacks and hospital admissions, and its mortality is unacceptably high (2). Biologics is an innovative and highly targeted therapy that has been transforming the lives of many individuals with uncontrolled asthma symptoms. They work to reduce the frequency and severity of asthma exacerbations, improving the overall quality of life for patients and their families. The use of biologic therapy for severe asthma is in its early stages in paediatrics with CHI @ Tallaght administering biologic therapy for the first time in December 2021. **Method:** At each clinic visit to the respiratory department a patient's spirometry is performed and an asthma control test (ACT) is calculated using the ACT questionnaire. A detailed retrospective review of patient's healthcare records was conducted on all patients who have commenced biologic therapy under our care. Patient's spirometry, ACT and number of asthma exacerbations over a year prior to commencing biologic therapy was assessed. These markers were then reviewed at 3 monthly intervals post biologic treatment up to a 2 year period where applicable. **Results:** 10 patient's (7 males and 3 females) with severe asthma were reviewed with a mean age of 11.7 years. 80% of patients receiving biologics for severe asthma show a substantial reduction in their asthma control test, number of exacerbations and spirometry after 3 months. **Conclusion:** Biologic therapy can enhance the quality of life of children with severe asthma and reduce the burden of this chronic disease. However, it is not a one-size-fits-all treatment and consideration is required when determining a patient's eligibility for biologic therapy and selecting the correct biologic. Over the years to come, this service must continue to grow and evolve to serve this vulnerable population and continue to improve the lives of children with severe asthma. **Keywords:** Severe asthma, Biologic therapy **Conflict of Interest:** The authors declare no conflict of interest. **References:**

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