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Corticosteroid burden in children starting biologic treatment for severe asthma in the ERS CRC SPACE registry

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INTRODUCTION

Biologics have transformed paediatric severe asthma, but access is limited by strict eligibility criteria, resulting in high treatment burden, mainly from high-dose corticosteroid use before biologic initiation.

AIMS

Using the ERS CRC SPACE (Severe Paediatric Asthma Collaborative in Europe) international registry, we assessed inhaled and systemic corticosteroid use in children aged 6–17 years with severe asthma at biologic initiation. All patients were on GINA step 4–5 therapy.

METHODS

Data were collected within 1 month before biologic initiation. Results are presented as median (IQR) or number (%). Patients with asthma exacerbations needing ≥3-day systemic corticosteroid (SC) courses in the prior 12 months are reported. Quality of life was assessed using the Paediatric Asthma Quality of Life Questionnaire (PAQLQ, standardised form).

RESULTS

216 children (median age 11 (8-13) years; 57.4% male) were included. Median age at asthma diagnosis was 3 (1-6) years. 35 patients (16.2%) used single ICS inhalers plus a second controller; 181 (83.8%) used combined ICS/long-acting β agonist inhalers. Median ICS dose was 470 (300-500) µg/day fluticasone propionate equivalent. 3 patients (1.4%) received regular SC (prednisolone 15mg/day, prednisolone 30mg/day; dexamethasone 12mg/month). In the preceding 12 months, 65 patients (30.1%) required 2-3 SC courses; 56 (25.9%) required 4-5 courses; 44 (20.4%) required 6-10 courses; and 10 (4.6%) required ≥10 courses. PAQLQ scores <6 (moderate/severe impairment) was found in 159 (73.6%) patients.

CONCLUSION

At biologic initiation, children with severe asthma had high SC courses and ICS dosing burden, as well as impaired

quality of life, highlighting the need for earlier biologic intervention to improve control and reduce corticosteroid exposure.
