Results In June-July 2019 (pre SRC pilot), there were 750 live births ≥ 34 weeks gestation and 104 babies ≥ 34 weeks admitted to the postnatal ward who received antibiotics (13.9%). In April-May 2020 (post SRC introduction), there were 698 live births ≥ 34 weeks gestation and six postnatal babies ≥ 34 weeks received antibiotics (0.9%; risk reduction 87%). In the post SRC cohort, 46 babies would have received antibiotics under NICE guidance but were not preemptively treated for sepsis following SRC. There were no missed cases and average length of stay decreased from 3.3 days to 2.2 days post SRC implementation. Additionally, 73 babies born between September-November 2020 underwent KP SRC. There was one missed case but the blood culture was negative.

Conclusions The marked reduction of antibiotic use led to shorter average initial hospital stay and this was particularly important in the post-SRC group for mothers who were without their birthing partner due to the Covid-19 visiting restrictions.

Our department continues to use the SRC to guide preemptive antibiotic use in infants born ≥ 34 weeks and admitted to the postnatal ward. Safety outcome monitoring continues and we are participating in a pan-London EOS observational study which aims to be sufficiently powered to assess safety comparison data between SRC and NICE guidance.

Paediatric Special Interest Group: British Society of Haematology

833 IMPORTANCE OF IDENTIFYING ASTHMA IN PAEDIATRIC SICKLE CELL PATIENTS TO PREVENT ACUTE CHEST SYNDROME AND OTHER SICKLE RELATED MORBIDITIES

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Background Asthma and Sickle Cell Disease (SCD) both trigger airway inflammation, and the interplay of these two conditions when present together, as well as their relationship with acute chest syndrome (ACS), have been a matter of increasing scientific interest.

Objectives We investigated the clinical and laboratory characteristics of our paediatric sickle cell patients with asthma and compared them to the non-asthma group.

Methods Retrospective review of electronic patient records from the departmental sickle cell database and laboratory results.

Results The prevalence of asthma in our paediatric sickle cell cohort was 10.8%, which is comparable to other studies. The incidence of ACS in the group of patients with asthma was 64.3% which is significantly higher compared to the 28.4% in non-asthma group, [RR 3.7 (1.3, 10.5)]. Reversely, the prevalence of asthma appeared to be higher in children with history of ACS [RR 2.25 (1.4, 3.6)]. The asthma group also had higher incidence of vaso-occlusive crises requiring hospital attendance (71%) compared to the non-asthma group (51%). The laboratory and clinical characteristics of sickle cell patients with and without asthma are summarized in table 1. There was no significant difference in the mean Haemoglobin, LDH and Vitamin D levels between the asthma and the non-asthma group, but the mean eosinophil count was significantly higher

Abstract 833 Table 1

	Asthma group (n=14)	Non-asthma group (n=116)
Demographics		
Gender (% Female)	29%	53%
Mean Age, years	11.6	9.2
Genotype		
HbSS	71.4%	69%
HbSC	14.3%	26.7%
HbS/beta thalassaemia	14.3%	4.3%
Treatments		
Hydroxycarbamide treatment	21.4%	31%
Transfusion Programme	0%	5%
Clinical Characteristics		
ACS (% yes)	64.3%	28.4%
Painful episodes (% yes)	71%	51%
OSA (% yes)	42.9%	6%
Atopy (% yes)	57.1%	7.8%
Laboratory parameters		
Mean Steady State Haemoglobin (95% CI), g/L	88.7 (80, 98)	93.7 (90, 97)
Mean LDH (95% CI), U/L	973 (675, 1272)	973 (896, 1052)
Mean Eosinophil count (95% CI), $10^9/L$	1.03 (0.57, 1.49)	0.35 (0.27, 0.43)
Mean Vitamin D levels (95% CI), nmol/L	56.1 (41, 72)	59.3 (54, 64)
Vitamin D sufficiency (%)	43%	51%

in the asthma group ($p=0.008$), as were the rates of obstructive sleep apnoea (OSA) and atopy ($p<0.001$). Vitamin D deficiency was highly prevalent across our entire SCD cohort; 57% of patients in the asthma group had suboptimal levels. Although all our asthma patients were prescribed regular preventer inhalers, issues with poor adherence were documented in 36% of cases.

Conclusions Children with SCD and asthma have increased morbidity when compared to non-asthmatic SCD children, including higher incidence of ACS and vaso-occlusive crisis. Clinicians can use the already available haematological indices (including eosinophil counts) and atopy-focused history as screening tools to identify cases that require further evaluation of asthma. Confidently diagnosing asthma, aided by spirometry, FeNO and IgE levels, initiating appropriate management with preventer therapy and actively addressing adherence issues, may reduce sickle related morbidities such as ACS. Finally, in light of the recently emerging evidence linking vitamin D and atopic diseases, we recommend regular monitoring and treatment of vitamin D deficiency in children with SCD and asthma.

Association of Paediatric Emergency Medicine

834 COMPARISON OF PREVALENCE AND CHARACTERISTICS OF FRACTURES IN TERM AND PRETERM INFANTS IN THE FIRST 3 YEARS OF LIFE

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