

Prevalence of serious bacterial infections in children with sickle cell disease at King Abdulaziz Hospital, Al Ahsa

Manal Alsaif¹, Moshtag Abdulbaqi¹, Khalid Al Noaim², Mustafa Aghbari¹, Muneera Al Abdulqader², and Joan Robinson³

¹King Abdulaziz Hospital

²King Faisal University

³University of Alberta

July 16, 2020

Abstract

Objective: The main aim was to report the prevalence and severity of serious bacterial infections (SBI) in children with sickle cell disease at King Abdulaziz Hospital, Al Ahsa, Saudi Arabia to aid in determining whether outpatient management of such cases is appropriate. **Methods:** We conducted a retrospective chart review of febrile children less than 14 years of age admitted with sickle cell disease 2005 through 2015. **Results:** During 320 admissions, 25 children had SBIs (8%) including pneumonia (n=11), osteomyelitis (n=8), bacteremia (n=3, all with *Salmonella* species) and UTI (n=3). All recovered uneventfully. **Conclusion:** It appears that in the current era, less than 10% of febrile children with sickle cell disease in our center are diagnosed with a SBI. Over an 11-year period, there were no sequelae or deaths from SBI. Given these excellent outcomes, outpatient ceftriaxone should be considered for febrile well appearing children with sickle cell disease if they have no apparent source and parents are judged to be reliable.

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Manal A. Alsaif, MD^{1*}, Moshtag Abdulbaqi, MD¹, Khalid Al Noaim, MD², Mustafa Aghbari, MD¹, Muneera Alabdulqader, MD², Joan L. Robinson, MD³

¹Department of Pediatrics, King, Abdulaziz Hospital, King Abdullah International Medical Research Center, Al-Ahsa, Saudi Arabia

² Department of Pediatrics, King Faisal University, College of Medicine, Al-Ahsa, Saudi Arabia

³ Department of Pediatrics, University of Alberta, Edmonton, Canada

*Correspondence to:

Manal A. Alsaif, MD, Department of Pediatrics, King Abdulaziz Hospital, King Abdullah International Medical Research Center, P.O. BOX 2477, Pin Code 31982,

Tel: +966 13 533 9999 Ext 33389, Fax: +966 13 533 9999 Ext 33844,

Email: saifma@ngha.med.sa

Word count for abstract: 179

Word count for main text: 2551

Number of tables: 4

Running title: Infections in children with sickle cell disease

Keywords: serious bacterial infection, sickle cell disease, Bacteremia, Pneumonia, osteomyelitis

Abbreviations:	
SBI	Serious bacterial infections
SCD	Sickle-cell disease
HIB	<i>H. influenzae</i> type B
PCV7	pneumococcal conjugate vaccine
KAH	King Abdulaziz Hospital
ED	Emergency department
UTI	Urinary tract infection
SCD-Thalassemia	sickle cell beta thalassemia
WBC	White blood cell
HPF	High power field
CSF	Cerebral spinal fluid
CI	confidence interval
ACS	Acute chest syndrome
CXR	Chest X-ray
NACSS	National Acute Chest Syndrome Study
RSV	respiratory syncytial virus

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