

which the WHO expanded programme on immunization vaccines, as well as anti-typoid (Typhim vi), meningococcal (Meningo A + C) and anti-pneumococcal (Pneumonia 23) vaccines are administered systematically, and oral penicillin V is prescribed for children under 6 years. The Centre provides also systematic malaria prophylaxis with sulfadoxine-pyrimethamine.

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It was a cross-sectional descriptive study conducted from April 2014 and January 2016. To be included in the study, patients were supposed to be between 6 months and 15 years of age and come for consultation or be hospitalized with fever (Temperature 38°C). Two hundred and thirty one sickle cell patients (SS, SC, S/ β^0 , S/ β^+) was enrolled in this study. The consent of parent and assent for children had to be obtained in advance. The study was approved by the National Health Sciences Ethics Committee.

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A detailed medical history and a clinical examination were performed for each patient during the screening visit; this information was recorded in the case report form along with socio-demographic information, clinical and therapeutic history and physical examination data (including axillary temperature, respiratory and heart rates, and oxygen saturation). A chest x-ray was requested in case of suspected pneumonia or acute chest syndrome. A venous blood sample was

Bacteria isolated	Number of bacteria isolated (n)	Origin of the bacteria isolated	
		Blood (Percentage $100 \times n/10$)	Urine (Percentage $100 \times n/33$)
<i>E. coli</i>	15	1 (10)	14 (43.75)
<i>Klebsiella pneumoniae</i>	5	1 (10)	4 (12.5)
<i>Enterococcus faecalis</i>	3	-	3 (9.03)
<i>Enterobacter</i> spp.	2	-	2 (6.25)
<i>Salmonella</i> group	4	4 (40)	-
<i>Staphylococcus</i> spp.	3	2 (20)	1 (3.03)
<i>Pantoea</i> spp.	1	-	1 (3.03)
<i>Pseudomonas aeruginosa</i>	1	-	1 (3.03)
<i>Candida albicans</i>	3	-	3 (9.03)
<i>Burkholderia cepacia</i> group	1	1 (10)	-
<i>Serratia</i> fcaria	1	-	1 (3.03)
<i>Raoultella ornithinolytica</i>	1	-	1 (3.03)
<i>Acinobacter iwoffi</i>	1	-	1 (3.03)
<i>Chromobacterium violaceum</i>	1	-	1 (3.03)
<i>Corynebacterium</i>	1	1 (10)	-
Total	43	10 (100)	33 (100)

E. coli: *Escherichia coli*; n: Number

Table 1: Bacteria isolated in urine and blood cultures during fever in our study population.



shows a high frequency of bacterial infection in this context, mainly related to enterobacteria other than salmonella. However, malaria and viral infections are important in the aetiologies of fevers and life-threatening complications. The immunological features that contribute to the occurrence of these infections among sickle cell patients should be explored in our context.

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