PEDIATRIC OSTEOMYELITIS AND SEPTIC ARTHRITIS: 10-YEAR OVERVIEW OF A PORTUGUESE HOSPITAL

Pedro Marinho¹; Ana de Carvalho Vaz¹; Francisco Ribeiro-Mourão¹; Vera Gonçalves¹; Mariana Costa¹
1 Serviço de Pediatria da Unidade Local de Saúde do Alto Minho

BACKGROUND AND AIMS

Osteomyelitis (OM) is an infection localized to bone, while **Septic Arthritis (SA)** is an infection of the joint, both usually due to bacterial infection.

This overview aims to characterize the patients, diagnosis and treatment of OM and SA cases diagnosed in a Pediatrics department of a Portuguese hospital, over a 10-year period.

METHODS

The authors present a retrospective observational study including all patients younger than 18 years, admitted in our Pediatrics department between 04/2008 and 04/2018, with diagnosis of **OM** or **SA**. Data regarding the patient, diagnosis, treatment and follow-up was analyzed.

RESULTS AND DISCUSSION

OSTEOMYELITIS

n=12

♂66,7% Avg. Age = 9,8 years [3 months - 15 years]

- 100% of cases presented with **pain**, with an average of **5,9 days** of pain before admission to the Emergency Service.

- 75,0% presented with **fever**.
- With imaging techniques, no **pathological signs** were found in CT scans, but were described in **90% of MRI's**.
- 33,3% of patients underwent **surgical procedure**.

MICROBIOLOGY		
	OM	SA
Positive Samples	75,0%	57,1%
Isolated Agents:		
<i>S. aureus</i> (MS)	66,7% 37,5% Blood Culture; 12,5% Pus; 37,5% in both samples	50,0% 42,8% in Synovial Fluid; 28,6% in Blood Culture; 28,6% in both samples
<i>S. pneumoniae</i>	8,3% 100% in Blood Culture	-
<i>S. agalactiae</i>	-	7,1% 100% in Blood Culture

SEPTIC ARTHRITIS

n=14

♂50,0% Avg. Age = 7,7 years [12 days - 17 years]

- 100% of cases presented with **pain**, with an average of **4,8 days** of pain before admission to the Emergency Service.

- 42,8% presented with **fever**.
- With imaging techniques, **pathological signs** were described in **63,6% of Ultrasounds** and in **100% of MRI's**.
- 57,1% of patients underwent **surgical procedure**.

DISCUSSION

Despite being a rare diagnosis, prompt recognition and treatment of OM and SA can help prevent long-term disability. Pain seems to be the most prevalent presentation, but **clinical awareness** is paramount.