A CASE OF ACUTE OSTEOYELITIS DUE TO PANTON- VALENTINE LEUKOCIDIN (PVL) - POSITIVE COMMUNITY-ACQUIRED METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) IN 3-YEARS-OLD CHILD

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BACKGROUND

Osteomyelitis is defined as an infection of the bone, bone marrow, and the surrounding soft tissues. Most cases of acute hematogenous osteomyelitis in children are caused by Gram-positive bacteria, principally *Staphylococcus aureus* (SA). Most community-acquired methicillin-resistant *Staphylococcus aureus* (CA-MRSA) infections affect skin or soft tissues, while invasive and life-threatening illnesses including osteomyelitis are less common. Paediatric acute hematogenous osteomyelitis (AHOM) is a serious disease requiring early diagnosis and treatment.

CASE REPORT

A case of acute osteomyelitis of the femur caused by Panton-Valentine leukocidin (PVL)-positive CA- MRSA in a 3-year-old girl in good health is presented. She had an acute onset of fever, decreased movement of his left leg with limping and increased irritability. PVL-positive MRSA was isolated also from blood culture. She accidentally falled down and developed swelling of the leg. Drenaige of the abscess was positive for PVL-MRSA. Because of recurrence of fever and worsening of inflammatory indexes, MRI was done showing femur osteomyelitis. A pure bone biopsy revealed extensive inflammation with no evidence of neoplasm, and PVL-positive MRSA was isolated from the culture. Antibiotic treatment, with 8 weeks of intravenous vancomycin and meropenem. One years after treatment completion, there has been no relapse of infection.

INITIAL MRI

MRI AFTER 2 MONTHS OF TX

MRI AFTER 1 YEAR

CONCLUSIONS

This case strongly suggests that we need to be aware of CA-MRSA osteomyelitis, which requires a high level of suspicion, prompt diagnosis, and appropriate antibiotic treatment.