

Images in Clinical Hematology

Massive bone marrow infiltration by *Streptococcus pyogenes* during severe community pneumonia

Tayrine Fernanda Micheli de Oliveira, Pollyana Cristina Bernardes Valize, Leonardo Rodrigues de Oliveira  *

Universidade Federal do Triângulo Mineiro (UFTM), Uberaba, MG, Brazil



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A previously healthy 7-month-old boy was referred for fever and abdominal distension which had started 3 days previously. At admission, the patient had a compromised clinical condition and signs of severe sepsis. His abdomen was distended, presenting marked hepatosplenomegaly. The laboratory investigation revealed anemia (Hb 7.6 g/dL), a leukocyte count of $3.86 \times 10^9/L$ (77% neutrophils, 15% lymphocytes),

severe thrombocytopenia ($29 \times 10^9/L$), and an elevated C-reactive protein (390 mg/L). Community pneumonia was confirmed after a chest X-ray analysis.

Due to hepatosplenomegaly and cytopenias, a bone marrow sample was analyzed and the results revealed intense infiltration by gram-positive bacteria arranged in chains, free in the smear and in the cytoplasm of neutrophils and

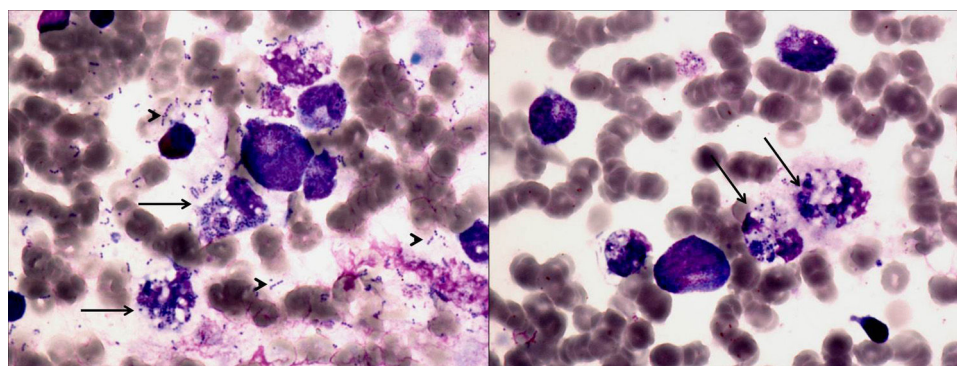


Figure 1 – Bacteria free in the bone marrow smear (arrowhead) and in the cytoplasm of macrophages (arrow). Leishman stain. Magnification 1000x.

* Corresponding author at: Rua Getúlio Guaritá, 130, 38025-440 Uberaba, MG, Brazil.

E-mail address: leonardorodoli@hotmail.com (L.R. Oliveira).

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macrophages (Figure 1).^{1,2} Blood and pleural effusion cultures revealed the rapid growth of *Streptococcus pyogenes* colonies.

Conflicts of interest

The authors declare no conflicts of interest.

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