Late onset neonatal Candida albicans osteomyelitis and arthritis: a case report and literature review

To the Editor

Dear Editor,

Reading the article "Late onset neonatal Candida albicans osteomyelitis and arthritis" in the March 2023 issue of the Belgian Journal of Paediatrics, I was surprised that immunologic screening and/or the possibility of an immune deficiency was not discussed in more detail (1).

Severe / recurrent fungal infections are, in my limited immunologic knowledge, an immune deficiency until proven otherwise. IgG, IgA, IgM and C3/C4 were determined, but I don't think these are the most logical tests for this infection. For example, neutrophil dysfunction or T cell problems would be better to check.

It might be interesting to discuss this with an immunologist. I think making doctors more aware of immune deficiencies would be very helpful.

Yours sincerely,

Susanne van Steijn

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1. Kirat N, Van Mechelen K, De Beaumont J, Driessche KV, Fabry K, De Smet E, et al. Late onset neonatal Candida albicans osteomyelitis and arthritis: a case report and literature review. Belgian Journal of Paediatrics. 2023;25(1):11-7.

Author's reply

Dear Editor,

We thank Dr. Suzanne van Steijn for her comment on our manuscript entitled "Late onset neonatal Candida albicans osteomyelitis and arthritis" published in BPJ 2023;25(1).

We acknowledge that cellular immunodeficiency is a significant risk factor for invasive Candida infection, as shown in the table of potential risk factors for Candida infection in our manuscript. Undoubtedly, extreme prematurity in neonates weighing less than 1000 grams as an underlying immunodeficiency is a well-recognized risk factor, along with other additional factors in our patient's case, such as prolonged exposure to intravenous lipids, broad-spectrum antibiotics, and prolonged use of central lines.

However, we did not exclude the possibility of a primary cellular immunodeficiency in this child, as suggested by Dr. van Steijn, for several reasons. First, the risk factors mentioned above. Second, the blood volume required to perform neutrophil function tests and flow cytometry for T-cell and B-cell quantification was not available. Third, the favorable clinical response to antifungal treatment. Finally, the patient was lost to follow-up after clinical improvement and relocation outside Belgium.

Furthermore, to the best of our knowledge, there are no reported cases of invasive Candida infection as the initial manifestation of primary immunodeficiency in neonates.

Yours sincerely,

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