Nascer e Crescer - Birth and Growth Medical Journal
2020;29(2): 129-130. doi:10.25753/BirthGrowthMJ.v29.i2.18721

WHAT IS YOUR DIAGNOSIS

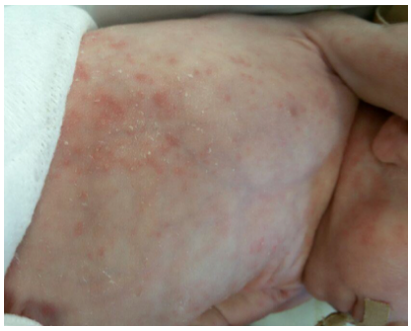
DERMATOLOGY CLINICAL CASE

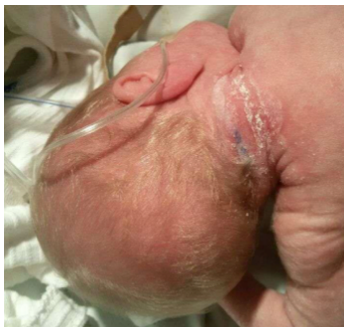
CASO CLÍNICO DERMATOLÓGICO

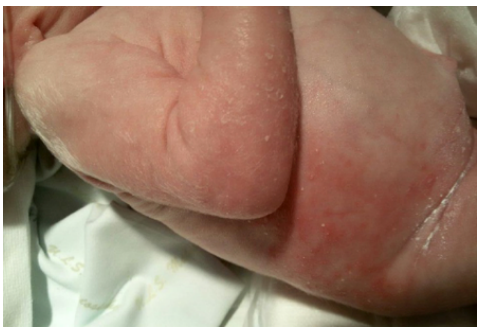
Ana Luísa Santos[I], Sara Pires da Silva[I], Inês Leite[II], Rute Vaz[III], Maria José Costa[III], Alexandrina Portela[III]

A female neonate was born by cesarean section at 29 weeks of gestation. Five days before delivery, premature membrane rupture occurred. At 25 weeks of gestation, Candida albicans was identified in maternal vaginal exudate. On the second day of life, widespread skin eruptions were noticed during physical examination. No other symptoms were observed. Blood panel revealed leukemoid reaction (56,990 leukocytes/µL) with negative c-reactive protein. Urine and blood cultures were negative. Collaboration of Department of Dermatology was requested at this point and microbiological lesion examination was performed.

What is your diagnosis?







I. Department of Pediatrics, Hospital Pedro Hispano, Unidade Local de Saúde de Matosinhos. 4454-509 Matosinhos, Portugal. analuisa_127@hotmail.com; sarampsilva@gmail.com
II. Department of Dermatology, Hospital Pedro Hispano, Unidade Local de Saúde de Matosinhos. 4454-509 Matosinhos, Portugal. inesbrandaoleite@gmail.com
III. Department of Neonatology, Hospital Pedro Hispano, Unidade Local de Saúde de Matosinhos. 4454-509 Matosinhos, Portugal. rute.vaz@ulsm.min-saude.pt; jccmaria@gmail.com; portelalex@gmail.com

DIAGNOSIS

Congenital cutaneous candidiasis

DISCUSSION

Candida skin infections are common during neonatal period.[1] However, congenital cutaneous candidiasis (CCC) is a rare disease, with less than 100 cases published in the medical literature.[1,2] Reported in term and preterm infants, CCC is acquired *in utero* via ascending *Candida* infection.[3] In the present case, lesion microbiological examination identified *Candida albicans*, which was also subsequently detected in placenta microbiological examination. The patient was treated with fluconazole during 14 days, with clinical improvement.

Despite the high incidence of *Candida albicans* vaginal infection during pregnancy (around 20–25%), only less than 1% of cases develop chorioamnionitis – believed to be the underlying mechanism of fetal infection –, even though the exact etiopathogenesis remains unknown.[1,2]

Contrarily to acquired cutaneous candidiasis, in which skin lesions appear after the first week of life, CCC often presents within the first six days.[1,3] Clinical presentation is variable and may include erythema, pustules, and exfoliation or desquamation, and skin involvement is diffuse.[4] Typically, no analytic alterations are found. Diagnosis can be confirmed by microscopic examination and cutaneous lesion culture.[2]

Empiric systemic antifungal therapy should be promptly started at the time of skin lesion presentation and maintained for at least 14 days to prevent dissemination and decrease mortality risk.[4] Antifungal agent choice (amphotericin B or fluconazole) remains controversial and requires further research.[2]

Congenital candidiasis can cause a variety of clinical features, ranging from diffuse erythematous skin eruption to systemic disease, with mortality potentially reaching 40% in the latter.[2,4] Although all infants are at risk of disseminated disease, preterms have a higher risk due to their immature and compromised mucocutaneous barrier and systemic defenses.[1]

With this case, the authors aim to raise awareness to CCC, a rare disease in which prompt recognition and early antifungal treatment are paramount for adequate infant management.

ABSTRACT

Congenital cutaneous candidiasis is a rare disease acquired *in utero* via ascending *Candida* infection. Skin involvement is diffuse and often appears in the first six days of life. Diagnosis can be confirmed by microscopic examination and cutaneous lesion culture. Empiric therapy with systemic antifungal should be promptly started at the time of cutaneous manifestations, specially in preterm infants, to prevent dissemination and decrease mortality risk.

Keywords: congenital cutaneous candidiasis; newborn

RESUMO

A candidíase cutânea congénita é uma doença rara causada por infeção intrauterina por *Candida*. Manifesta-se nos primeiros seis dias de vida com surgimento de exantema difuso. O diagnóstico pode ser confirmado por exame microbiológico da pele. Deve ser iniciada terapêutica empírica com antifúngico sistémico no momento da apresentação, sobretudo em recém-nascidos pré-termo, de modo a evitar a disseminação e diminuir o risco de mortalidade.

Palavras-chave: candidíase cutânea congénita; recém-nascido

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CORRESPONDENCE TO
Ana Luísa Santos
Pediatrics Department
Hospital Pedro Hispano
Unidade Local de Saúde de Matosinhos
Rua de Dr. Eduardo Torres
Senhora da Hora
4454-509 Matosinhos
Email: analuisa_127@hotmail.com

Received for publication: 16.10.2019
Accepted in revised form: 13.01.2020