

Infant oral candidiasis associated with *Candida albicans* infection of the mother's milk

R.R. de Almeida Cardoso, Vanuza Leite

ABSTRACT

Oral candidiasis is frequently observed in newborns but it is uncommon to persist for a long time. Here it is being described the case of an eighteen months child with severe oral candidiasis since the first days of the life resistant to topic and systemic treatments. As it was found *Candida albicans* in the mother's milk the breast-feeding was discontinued. In a few days the child was asymptomatic.

Key words: candidiasis, immunodeficiency, cranberry

INTRODUCTION

Systemic or localized candidiasis is a common finding in immunity-compromised patients.¹ Examples are HIV positives and patients under anti-tumour chemotherapy. The use of antibiotics is also an aggravating factor.

Oral and cutaneous candidiasis is also found in normal babies in the initial periods of life, and apparently health adult women often suffer from chronic vaginal candidiasis. As so, the cause for this problem can be found or may lay on a field of unknown origin. This paper describes the case of a child with severe exclusive oral candidiasis, its possible cause, and the treatment modality.

Case Report

A 18-month old caucasian male, with normal weight and height for the age presented to our department. Physical examination and developmental milestones were unremarkable except for a creamy whitish substance on the undamaged mouth mucosa since the first days of life. The baby was in mixed feeding: vegetable soups, fruits, beef and chicken meats, and commercial cereals but still being breastfed. The diagnosis was chronic oral candidiasis made after microbiological assessment (microscopy and culture).

Several treatment schedules have been followed without results: Systemic antifungal drugs (nystatin and fluconazol) and topical applications of nystatin, violet blue, or alkaline solutions (sodium bicarbonate).

Laboratory tests were performed: Serum immunoglobulins (IgE 84.5 UI/ml, IgG 944 mg/dl, IgM 119 mg/dl, IgA 39 mg/dl) on the normal limits, RAST for *Candida albicans*, β -lactoglobulin and casein negatives, secretory IgA 10.4 mg/dl, 10.12 am serum cortisol 6.00 μ g/dl, glucosemia 89 mg/dl, IgG anti-cytomegalovirus 9.30 UA/ml, HIV 1/2 negative, sedimentation rate 51 mm in the first hour, red and white blood counts within the normal range, specific serum IgG, IgM and IgA for *Candida albicans* respectively 1:1280, 1:80, 1:320 when normal values should be 1:640 to IgG, 1:20 to IgM, and 1:160 to IgA. Skin test was positive with *Candida albicans* extract, showing a 1 x 1 cm wheal 48 hours later. Thus, it was not proved any immunological defect in the child or any deficient reaction to the *Candida albicans* infection. The physical examination of the mother was normal but the culture of breast milk showed the presence of *Candida albicans* and *Staphylococcus epidermidis*.

5 ml of 5% Cranberry (*Vaccinium macrocarpon* Ait) was prescribed as its proanthocyanidins works avoiding the *Candida albicans* adherence and

biofilm formation.² The child got better but still showing a significant amount of the oral whitish substance.

Breast-feeding was discontinued. After fifteen days the whitish creamy substance had disappeared. The cranberry syrup was discontinued and breast-feeding restarted. Seven days later the baby looked just like as in the beginning. Breast-feeding was discontinued. Ten days later very little whitish substance was seen in the lips angles. Cranberry syrup was restarted. Thirty days later, the baby's mouth was clean.

CONCLUSION

This case demonstrates how it is important to look for the origin of the problem not only in the patient but also outside him It is the first publication of chronic oral candidiasis in breastfed child provoked by the mother's milk.

AUTHOR NOTE

Roberto Ronald de Almeida Cardoso, Professor, (**Corresponding Author**) Department of Allergy and Immunopathology, Faculdades Integradas do Planalto Central (FACIPLAC), Brasilia DF, Brazil;
email: rronaldac@gmail.com
Vanuza Leite, Laboratory technician, Santa Paula Laboratory, Brasilia DF, Brazil

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