

**Case report:**

**Erosio blastomycetica interdigitale sign of Candidiasis and diabetes!**

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**Abstract**

The terminology Erosio blastomycetica interdigitale is used to describe a clinical entity characterized by erosions disposed interdigitalis on the hands and /or feet, in persons with poor controlled diabetes mellitus, the agent incriminated being Candida Albicans.

**Key words:** Erosio blastomycetica interdigitale; Candida Albicans; diabetes

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**Instoduction**

Erosio blastomycetica interdigitale is most commonly seen form of candidiasis; between the middle and ring fingers<sup>1</sup>. Clinically, a chronically denuded oval area. It may be accompanied by pain. The primary factor is chronic maceration. Exposing the skin to chronic irritants and moisture leads to breakdown of the skin barrier with subsequent colonization and growth of Candida<sup>1,2</sup>.

Erosio interdigitalis blastomycetica is one of the cutaneous manifestations of diabetes<sup>3</sup>.

Treatment it correcting or eliminating factors that can aggravate the condition. May be used topical or oral antifungal preparations<sup>3,4</sup>.

**Case Report**

A 52-year-old woman came to our Department of Dermatology for a medical opinion regarding her chronic allergic contact dermatitis on the left hand (Fig.1).

**Discussions**

Candida yeasts (especially Candida albicans) are normal inhabitants of skin and oral mucosa in immunocompetent persons, and the pathogenicity of Candida species is low. The tissue invasion by Candida followed by clinical manifestations

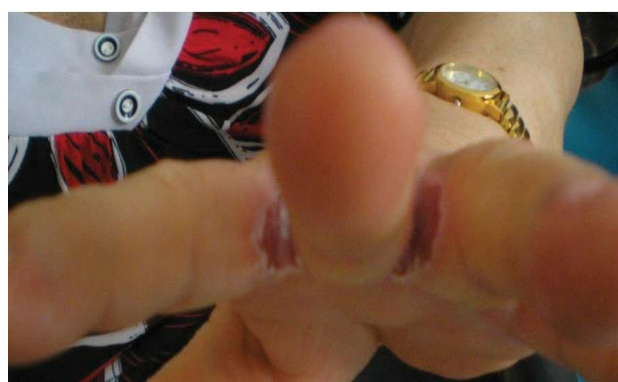


Figure 1: Maceration in the interdigital spaces



Figure 2: Candida Albicans culture.

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(Mucocutaneous candidiasis) requires systemic or local immunosuppression. Mucocutaneous Candidiasis is classified [4]:

One of the clinical forms of Mucocutaneous Candidiasis is Erosio blastomycetica interdigitale, rarely reported, being often misdiagnosed as irritant contact dermatitis. It is frequently seen in launderers, bartenders, homemakers [5], in general in people working with hands immersed long time in water with or without irritant substances. Rings (especially wedding rings) contribute to the retain of water and subsequent maceration, affected skin barrier, colonization and growth of Candida, all in persons with systemic immunosuppression, most frequent diabetes mellitus.

Clinically it is a denuded area, with maceration, slight erythema and pain, most commonly between the middle (third digit) and ring fingers (fourth digit); sometimes the toes are affected but much more rarely.

The first diagnosis, in most cases, is far from Candida infection and the first treatment recommended is topical corticosteroids that enhance the local immunosuppression and overgrowth of Candida species [6].

The diagnosis is confirmed by the isolation of Candida species: the exudates taken from the interdigitalis areas are examined directly (observation of mycelial forms on direct microscopic examination) and cultured for fungi.

Biopsy is extremely rare indicated just to exclude other possible diagnosis [7].

The most important problem is that physicians must have in mind the diagnosis of Erosio blastomycetica interdigitale when they see such patients.

Differential diagnosis includes irritant contact dermatitis, psoriasis and erythrasma (caused by corynebacteria).

Treatment is dominated by antifungal agents: topical (azole antifungal creams), associated with systemic therapy: itraconazole, terbinafine, amorolfine and correcting the immune status (diabetes mellitus!)

In 1917 Fabry [8] was the first who reported this type of yeast infection and gave it the name: Erosio blastomycetica interdigitale. In the following years many reports of this new disease have been published: Berendsen in 1918, Stickel in 1921, Greenbaum and Klauer in 1922, Mitchel in 1922 and the series continued over years. In that time the term Erosio blastomycetica interdigitalis was frequently switched to Erosio interdigitalis or saccharomycetica.

In the early 20,s the treatment was quite different as today: the patients were advised to keep their fingers out of water and soap, the application of one to two per cent aqueous solution of copper sulphate in the form of wet dressings three times daily, for ten minutes [9].

Erosio blastomycetica interdigitale in a patient must raise the suspicion of diabetes mellitus de novo or poor controlled.

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