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4. Bullous impetigo

Impetigo is a superficial skin infection encountered most frequently among children. It typically presents with multiple vesicular lesions on an erythematous base, which eventually crust over. There are 2 types: nonbullous and bullous. Both forms involve only the most superficial layers of the skin.

The nonbullous form is the most common and is likely to be caused by a mixed staphylococcal and streptococcal infection. The bullous form, however, is a highly contagious condition caused by an epidermolytic toxin produced most commonly by staphylococci of phage group 2 at the site of infection. The toxin causes intraepidermal cleavage below or within the stratum granulosum.¹

Predisposing factors include skin abrasions, minor trauma, burns, poor hygiene, insect bites, diabetes mellitus, primary varicella infection, and pre-existing skin disease, such as eczema or atopic dermatitis. Also, those with nasal or perineal *Staphylococcal aureus* colonization are at increased risk for developing impetigo.²

Diagnosis

Bullous impetigo commonly starts with small vesicles on the face, trunk, buttocks, perineum, or extremities, without surrounding erythema. These vesicles rapidly enlarge into flaccid, transparent bullae measuring from 1 to 5 cm in diameter. Bullae initially contain a clear yellow fluid that subsequently becomes dark yellow and turbid. Their margins are sharply demarcated, having no erythematous halo. The lesions heal more quickly than nonbullous lesions. The condition might be associated with fever, diarrhea, and weakness, but unlike nonbullous impetigo it is not associated with lymphadenopathy.²

The Nikolsky sign (sheetlike removal of epidermis with sliding pressure) is usually negative. Complications of impetigo include lymphadenitis, cellulitis, sepsis, or nephritis.



Cultures of fluid from an intact blister or moist plaque should yield the causative agent; if the patient appears ill, blood cultures should also be obtained. On histopathologic examination, lesions of bullous impetigo show vesicle formation, with neutrophils, in the subcorneal or granular region.^{2,3}

The differential diagnosis primarily includes all of the herpes simplex viral infections, allergic contact dermatitis, thermal burns, and bullous insect bites.

Treatment

Local treatment with 2% mupirocin ointment in addition to local care, which includes cleansing, removal of crusts, and application of wet dressings, is sufficient to cure mild cases.

Some studies have demonstrated that 2% mupirocin ointment is as safe and effective as oral erythromycin in the treatment of patients with impetigo.⁴

Complicated or widespread cases of bullous impetigo require 5 to 10 days of oral β -lactamase-resistant antibiotics, such as cephalexin or amoxicillin and clavulanate. In communities with low levels of resistance, erythromycin is usually effective. 

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Competing interests

None declared

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