

Staphylococcal scalded skin syndrome

Staphylococcal scalded skin syndrome (SSSS) is caused by *Staphylococcus aureus* toxin. It affects newborns and young children, and is rare in older children and adults.

Etiology and Pathogenesis

Staphylococcal scald skin syndrome causes exotoxin (exfoliatin) produced by some strains of *Staphylococcus aureus*. These are mainly group 2 phagotypes, strains 71 and 55. Toxins are spread in the body by blood from a site of infection located in the nasopharynx, umbilical cord or elsewhere. Exfoliatins cause epidermolysis in the stratum granulosum by binding to desmoglein 1. Bubbles are formed with sterile contents.



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Clinical picture

The first manifestation is scarlatiniform rash most pronounced on the face around the nose and mouth and conjunctivitis. After 2-5 days, skin desquamation occurs throughout the body. It is a positive Nikolsky flag. The disease is accompanied by general symptoms: fever, fatigue, loss of appetite. Fluid loss and thermoregulatory disorders occur due to extensive skin barrier disorders.

Therapy

The disease is treated with intravenous antibiotics. Usually, anti-staphylococcal penicillins, such as oxacillin, are the treatment of choice. Alternatively, first or second generation cephalosporins or vancomycin can be used.

Supportive care should include infusion therapy to compensate for fluid loss and conditioning of the internal environment and wound care.

Prognosis

In young children, mortality, despite the dire clinical picture, is relatively low at around 0.3% with proper antibiotic treatment. In adults, the disease tends to be more severe, mainly due to comorbidities, and mortality is about 4%.

Erythema usually disappears within a few days of starting treatment, erosions and crusts heal for several weeks. Sometimes pigmentation changes may persist for several months.

Links

Related articles

- Lyell's syndrome

References

- KLIEGMAN, Robert, et al. Nelson textbook of pediatrics. 19th edition. Philadelphia: Elsevier / Saunders, 2011. 2610 pp. ISBN 978-1-4377-0755-7.
- BARTONOVA, Jirina. Bacterial skin disease in the children's clinic. Pediatrics for practice [online]. 2014, vol. -, vol. 15 (4), pp. 206-208, also available from <<http://www.pediatricpropraxi.cz/pdfs/ped/2014/04/06.pdf>>.

Reference

1. ↑ Jump up to: a b c UpToDate: Staphylococcal scalded skin syndrome [database]. Wolters Kluwer, © 2019. Last revision 2019-05-29, [cit. 2019-05-31]. <<https://www.uptodate.com/contents/staphylococcal-scalded-skin-syndrome>>.