



Staphylococcal Parotitis in a Neonate

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A 38 week old, 3,290 g male neonate was born with Fryns' syndrome, an autosomal recessive disease that leads to death in most cases because of diaphragmatic hernia; the few survivors have mental retardation [1]. The neonate's two preceding sisters died because of diaphragmatic hernia associated with Fryns' syndrome. This patient had intact diaphragm but presented with a coarse face, micrognathia, anteverted nostrils, rocker-bottom feet, axial deviation of fingers, hypoplastic nails, agenesis of corpus callosum, subependymal pseudocysts, hypotonia, cryptorchidism, and hypoplastic kidneys.

At 7 days of age, he developed swelling, erythema and warmth of the left parotid and pre-auricular areas [Figure A], accompanied by dehydration, fever and signs of sepsis. External pressure on the affected parotid gland resulted in drainage of purulent material

from the opening of the ipsilateral Stensen duct [Figure B, arrow], suggesting the diagnosis of suppurative parotitis. A sepsis work-up was performed and empirical antibacterial therapy was initiated. Cultures from the bloodstream and pus grew *Staphylococcus aureus*. White blood cell and neutrophil counts and serum immunoglobulin levels were normal for age: IgG 615 mg/dl (range 251–906), IgM 27 mg/dl (range 6–105), and IgE 4 IU/ml (range 0–170). A chemiluminescence test that measures neutrophil respiratory burst after phorbol ester stimulation showed normal activity. Intermittent drainage of pus by pressure on the affected parotid gland along with intravenous cloxacillin led to full recovery.

Ig = immunoglobulin

Suppurative parotitis is a very rare condition, and only 111 cases have so far been reported in neonates [2,3]. Known risk factors include prematurity, malnutrition and dehydration. The majority of cases were caused by *Staphylococcus aureus*, but in a few cases, gram-negative, gram-positive and anaerobic bacteria and fungi were the causative pathogens [2,3]. Surgical drainage is rarely required, as was the case in our patient. We ruled out immune deficiency states that increase the risk for staphylococcal infections, such as hypogammaglobulinemia, neutropenia, or a defect of intra-neutrophil bacterial killing. Nonetheless, other immunologic defects could have been involved. This is the first reported case of neonatal suppurative parotitis in association with Fryns' syndrome.

References

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