

Spinal osteomyelitis as a complication of the late onset neonatal sepsis (LONS): (Analysis of clinical series)

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Abstract

9 pediatric patients aged from 7 till 19 month were operated due to severe kyphosis caused by spinal osteomyelitis as a manifestation of the late onset neonatal sepsis (LONS). The disease began at the age of 5 days to 2.5 months old. All patients had multiple foci of infection: pneumonia - 7/9, coxitis - 2/9, rib osteitis - 1/9, soft-tissue infection - 2/9, intestinal infection - 2/9; one was operated on cardiac abnormality. Spondylitis was diagnosed 3-12 months after the onset of the disease. Total destruction of 2-3 vertebral bodies in the thoracic spine complicated by paravertebral and epidural abscesses were in all cases. 4/9 patients had multi-segmental spinal lesions incl. 3 cases of cervical and 1 thoracic-lumbar destruction. Angular kyphosis was 64° (min 44°, max 80°) with compression of the dural sac. All patients had surgical treatment (age 7 to 19 months) with anterior fusion and posterior instrumentation of the spine. All cases were neurologically intact (pre-op and post-op).

Spinal osteomyelitis as a manifestation of late neonatal sepsis is rare and it diagnosed after the kyphosis' appearance. The disease is characterized by extensive destruction of the vertebral bodies with paravertebral and epidural abscesses and have to be differ from tuberculosis spondylitis due to the cultural and molecular genetic study of pathologic tissues. Surgical treatment of spondylitis as a sequela of late neonatal sepsis is carried out when the infection is under control and aims to the anterior column reconstruction and kyphotic deformity correction.