

Infantile Cortical Hyperostosis Secondary To Prostaglandin Therapy: Case Report

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INTRODUCTION:

Infantile cortical hyperostosis (ICH) is a benign self limiting disease appearing in early infancy. Common presentations are soft tissue swelling, bony changes which usually involves the long bones, ribs and mandible and hyper irritability associated with fever. Many other conditions mimic its presentation and need to be excluded such as acute osteomyelitis, physical trauma and bone tumors.

CASE REPORT:

This is a case report of a 74 days of life full term baby diagnosed with complex cyanotic heart disease (TGA/PDA/ASD/VSD). Child was started on PGE1 infusion since day 1 of life. On day 61 of life, the child was referred to rule out acute osteomyelitis as noted to have developed swelling over bilateral lower limbs with spiking of temperatures. Bilateral lower limbs were swollen, indurated and tender. Blood investigation showed raised TWBC of $23(10^3/uL)$ and ESR(35mm/hr). All other blood investigations were unremarkable.



Cortical hyperostosis over long bones.

DISCUSSION:

In our case, we believe the cause of the disease is due to the prostaglandin E1 infusion that was started since day 1 of life. The changes usually takes around 30-40 days to become visible.⁴ In ICH, there is an exacerbated subperiosteal intramembranous bone formation (hyperostosis), triggered by local inflammation (periostitis). The swelling is usually indurated and tender on palpation but not warm or erythematous. Radiography is the most valuable diagnostic study in ICH. X ray features show layers of periosteal new bone formation, with

cortical thickening. No laboratory tests are specific for diagnosis of ICH. ICH is mostly self-limiting and resolves within 12-24 months and usually does not require any treatment.

CONCLUSION:

The aim of this report is to highlight the rare complication that may arise from prolong use of prostaglandin in newborns with congenital heart disease. High index of suspicion is essential to make the diagnosis. Treatment is usually conservative.

REFERENCES:

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