Paediatric lateral sinus thrombosis caused by acute mastoiditis

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Background
• Lateral sinus thrombosis is a known intracranial complication of acute mastoiditis.
• An 8 year old child, presented to us with severe right sided neck pain associated with restricted cervical movements.
• There was history of right sided otalgia one month prior which resolved spontaneously.
• An urgent contrasted computed tomography (CT) revealed right otomastoiditis with venous thrombosis of right internal jugular vein extending from the right sigmoid-transverse sinus confluence.

Materials and Methods
• Initially a radiograph of the neck was done to visualise any gross anomalies.
• Subsequently a CT scan was done to assess the pathology.
• Ultrasound was done for monitoring in ward prior to discharge.

Results
• Patient responded well to intravenous antibiotics and low molecular weight heparin treatment.
• Upon discharge serial monitoring of the patient was done with aid of CT scans.
• She was treated at home initially with subcutaneous fondaparinux and subsequently low dose aspirin.

Discussion
• Lateral sinus thrombosis rarely occurs with the advent of the antibiotic era.
• However in the event of occurrence it should be treated aggressively.
• A classical presentation would be otalgia followed by neck stiffness and torticollis.
• CT scan is crucial to procure diagnosis and to show the thrombotic segment.
• All children with otogenic lateral sinus thrombosis have to be screened for prothrombotic states such as thrombophilia.
• Our patient was screened for factor V Leiden protein, Protein C, Protein S which all turned out as normal screen.

Conclusion
• Keeping a high level of suspicion is essential when dealing with otogenic lateral sinus thrombosis.
• Early detection of complications from acute mastoiditis is key to effective treatment.
• Thrombophilia screening is a must in the paediatric group.
• Anticoagulation therapy is warranted for lateral sinus thrombosis.
• CT scan imaging is pivotal to aid in response of treatment.

References: