PARAFALCINE SUBDURAL HAEMORRHAGE AFTER ACCIDENTAL DURAL PUNCTURE; a reminder to consider alternative differentials for post dural puncture headaches

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INTRODUCTION:

- Intracranial haemorrhage (ICH) post dural puncture is a rare complication of epidural insertion
- We present a case of a 34 year old woman who presented after a dural puncture with a severe headache

CASE REPORT:

- A primigravida woman had an inadvertent dural tap after epidural insertion with an 18G Tuohy needle
- The intrathecal catheter was left in situ receiving anaesthetist only top ups. Following vaginal delivery, the patient was discharged with safety advice
- She presented 48 hours later with severe headache radiating to the frontal region, nausea and vomiting and associated neck stiffness. She had no postural aspect to the headache or photophobia. On examination she had no abnormal neurology with normal observations and blood results
- A **CT brain** scan was requested due lack of postural component to her headache and the presenting complaint of vomiting which showed **'small parafalcine subdural haemorrhages (SDH) on the right side of the inter hemisphere space'**
- Neurosurgical advice was to be admitted for conservative management and observation
- Further imaging including CT Venogram and CT Angiogram did not show any vascular abnormality
- The patient's symptoms improved and she was discharged



DISCUSSION:

- Care should be taken to rule out other more serious causes of headaches in postnatal women such as meningitis, cerebral vein thrombosis, pre-eclampsia and ICH[1]
- The pathophysiology behind SDH after dural puncture is thought to be from traction and rupture of bridging veins due to low CSF pressure and vasodilation[1]
- This patient had no neurological deficit and her symptoms resolved but other case reports include large SDH after epidural insertion needing neurosurgical intervention[1]
- Although SDH after dural puncture is rare, a high level of suspicion will facilitate earlier detection
- The symptoms described are headache, vomiting, altered mental state, focal motor deficit, visual changes and aphasia/dysarthria[2]
- When symptoms are atypical of post dural puncture headache (PDPH) or do not respond to usual measures, investigations such as non contrast CT should be performed and depending on level of suspicion, a CT angiogram and venogram to investigate for vascular abnormalities and venous sinus thrombosis
- In patients who are anticoagulated earlier imaging is encouraged. Timely discussion with neurology and neurosurgeons is of paramount importance
- This rare case report highlights the importance of early neurological imaging to investigate PDPH

References:

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