

Unusual Reoccurrence of Postdural Puncture Headache and Subdural Hematoma After a Labor Epidural

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Background Information

The cause of Postdural Puncture headache (PDPH) is proposed to be from a combination of leakage of CSF such as through a dural hole, meningeal vasodilation, or intracranial hypotension, any of which may explain the characteristic most common symptom of headache made worse by standing upright ^[1].

Case presentation

27-year-old female with no significant past medical history presented at 38w6d estimated gestational age with an uncomplicated pregnancy. An epidural catheter was placed uneventfully at the L3-4 interspace using a 16-Gauge Tuohy needle with loss of resistance to air. Several hours later a Cesarean section was performed for fetal bradycardia.

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27-year-old healthy female at 38w6d in labor with fetal bradycardia

Labor epidural at L3-L4 with 16ga Tuohy needle, no complications of procedure, and unremarkable Cesarean Section

POD 1: bilateral neck stiffness and occipital headache worse with neck flexion, medical management pursued

POD 3: discharge with significant improvement of symptoms

POD 17 return to ER for worsened postural headache. CT head showing 6-8mm bilateral subacute vs chronic subdural hematomas

POD 18: Epidural blood patch, resolution, discharge

POD 21: reoccurrence of postural headache, second blood patch, discharge

POD28: reoccurrence of headache, fluoroscopically guided blood patch and middle meningeal artery embolization

POD 30: complete resolution and discharge



Figure 1: POD 17 Coronal CT showing bilateral subdural collections along the cerebral convexities, representing bilateral subacute to chronic subdural hematomas.

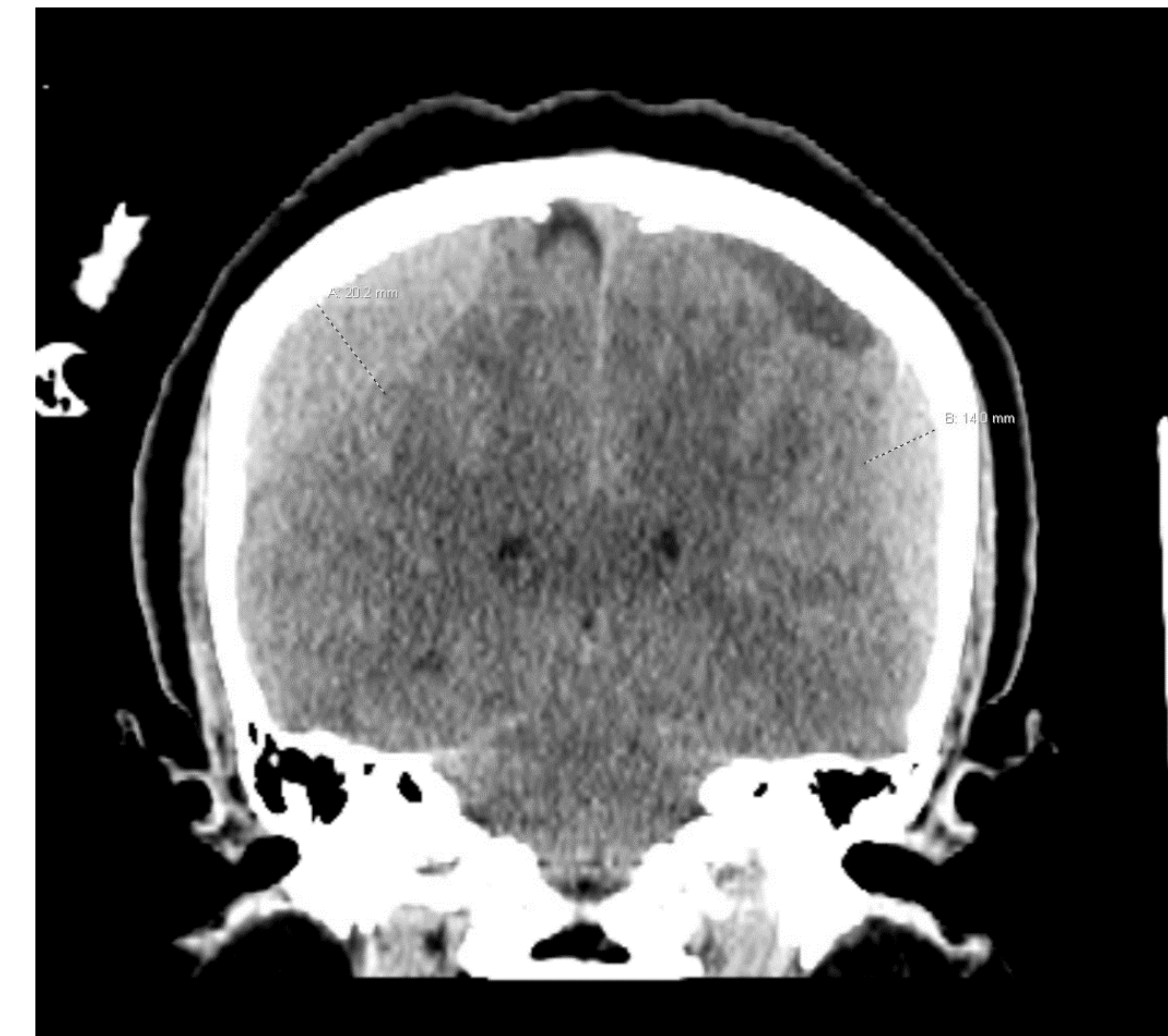


Figure 2: POD 28 Interval increase in size of bilateral epidural subdural hemorrhages, with newly appearing epidural hemorrhage, and with significant parenchymal mass effect.

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Discussion

Headache is the most common symptom of both intracranial hematoma as well as PDPH. This case illustrates a delayed presentation of subdural hematoma after epidural catheter placement.

Subdural hematomas after dural puncture are purported to be caused by sagging of the brain tissue and stretching of the subdural bridging veins ^[2].

Close follow-up and monitoring of symptoms were critical for identification of subdural hematoma and led to the treatment of a more involved intracranial pathology than was initially suspected.

Thank you!

REFERENCES

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