

Subdural hematoma and pneumocephalus after obstetric epidural anesthesia

Christopher Ching MD, Liane Germond MD

Department of Anesthesiology, Ochsner Clinic Foundation, New Orleans LA



Case Presentation

37 years old G5P0 presented for induction of labor.

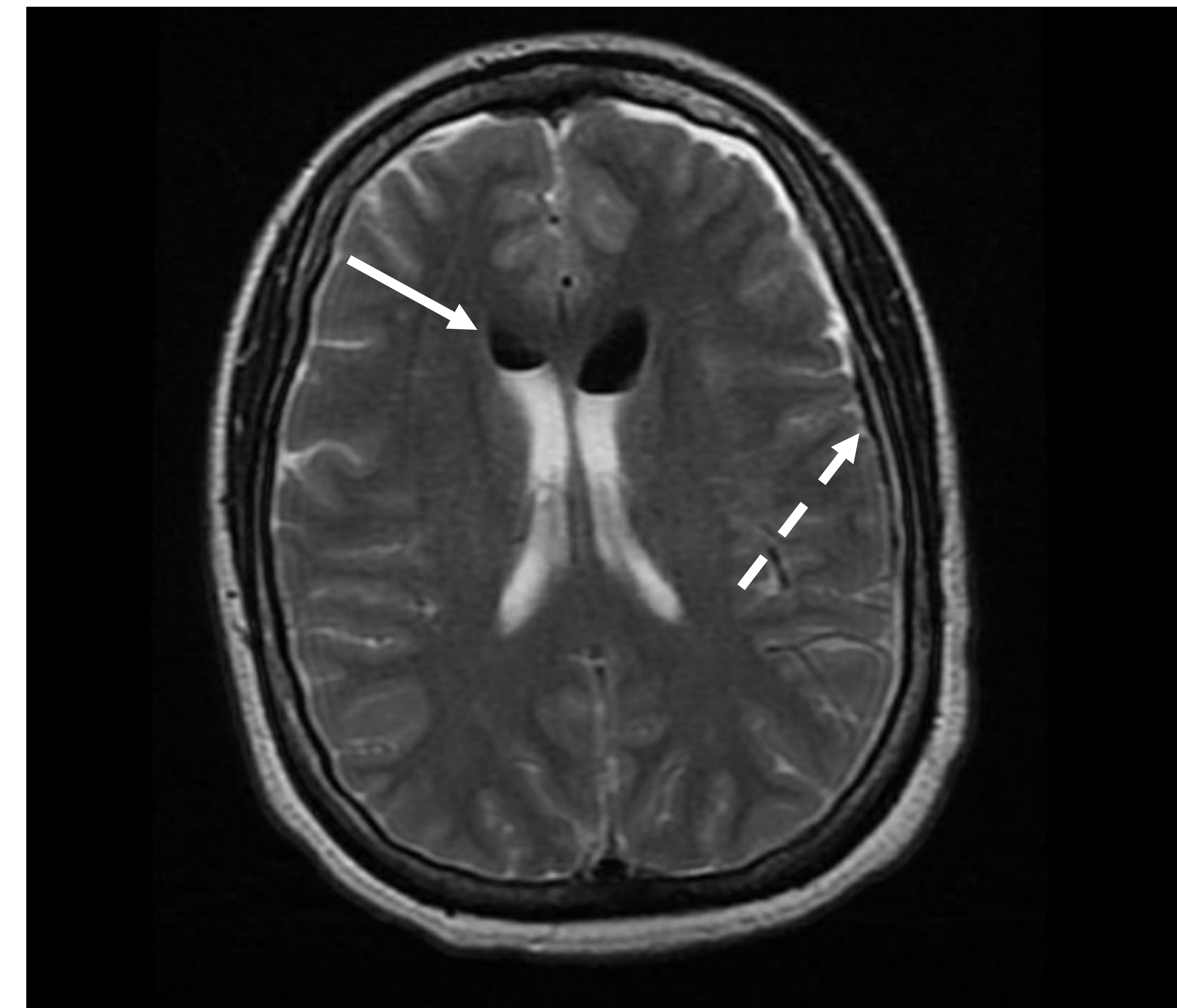
Epidural placed after 2 attempts – 1st attempt with DPE, suspected intrathecal placement with CSF aspiration from catheter, subsequently removed. 2nd placement uneventful

Patient underwent c-section for failure to progress.

POD 1 she reported severe headaches, symptoms suggestive of PDPH – refused EBP, got trial of Fioricet. EBP on POD2, immediate partial relief following

Worsening symptoms POD3 prompted MRI brain by OB team, revealing both pneumocephalus and frontoparietal subdural hematoma 2mm thickness w/o midline shift

MRI brain - pneumocephalus (solid) of lateral ventricles and small left frontoparietal subdural (dashed)



Subdural hematoma and pneumocephalus after obstetric epidural anesthesia

Christopher Ching MD, Liane Germond MD

Department of Anesthesiology, Ochsner Clinic Foundation, New Orleans LA



Case Presentation

Conservative management with 100% O₂, HOB restrictions, stopping Lovenox - slow symptomatic improvement and discharged POD7 with minimal headache

Readmitted POD16 for worsening headache and blurry vision. Found to have enlarging SDH, 15mm thickness with 3mm midline shift

MRI spine ordered to rule out CSF leak, revealed epidural and subdural hematoma from EBP

Neurosurgery consulted and recommended surgical evacuation. Patient declined surgery and instead treated with steroids.

Repeat head CT at 1 month follow up with decreasing SDH size, at 2 months SDH was resolved and patient asymptomatic

CT head with enlarging SDH and midline shift



Subdural hematoma and pneumocephalus after obstetric epidural anesthesia

Christopher Ching MD, Liane Germond MD

Department of Anesthesiology, Ochsner Clinic Foundation, New Orleans LA



Discussion

Prompt EBP when PDPH occurs

Important to consider intracranial pathology for headache not relieved by EBP

Pneumocephalus known complication of using air, can present as nausea, vomiting, headaches, seizures, neuro deficits

Treatment of subdural hematoma and pneumocephalus should involve neurology team and requires close follow up with low threshold for repeat imaging

References

Sherer DM, Et al. *J Matern Fetal Med.* 1999;8(3):138-140. doi:10.1002

Cuypers V, Et al. *Int J Obstet Anesth.* 2016;25:58-65. doi:10.1016/j.ijoa.2015.09.003

Zeidan A, Et al. *Int J Obstet Anesth.* 2006;15(1):50-58. doi:10.1016/j.ijoa.2005.07.001

MRI spine with subdural (dashed) and epidural (solid) hematoma

