

Post epidural blood patch complications:

What to Anticipate?

Maimonides Medical Center

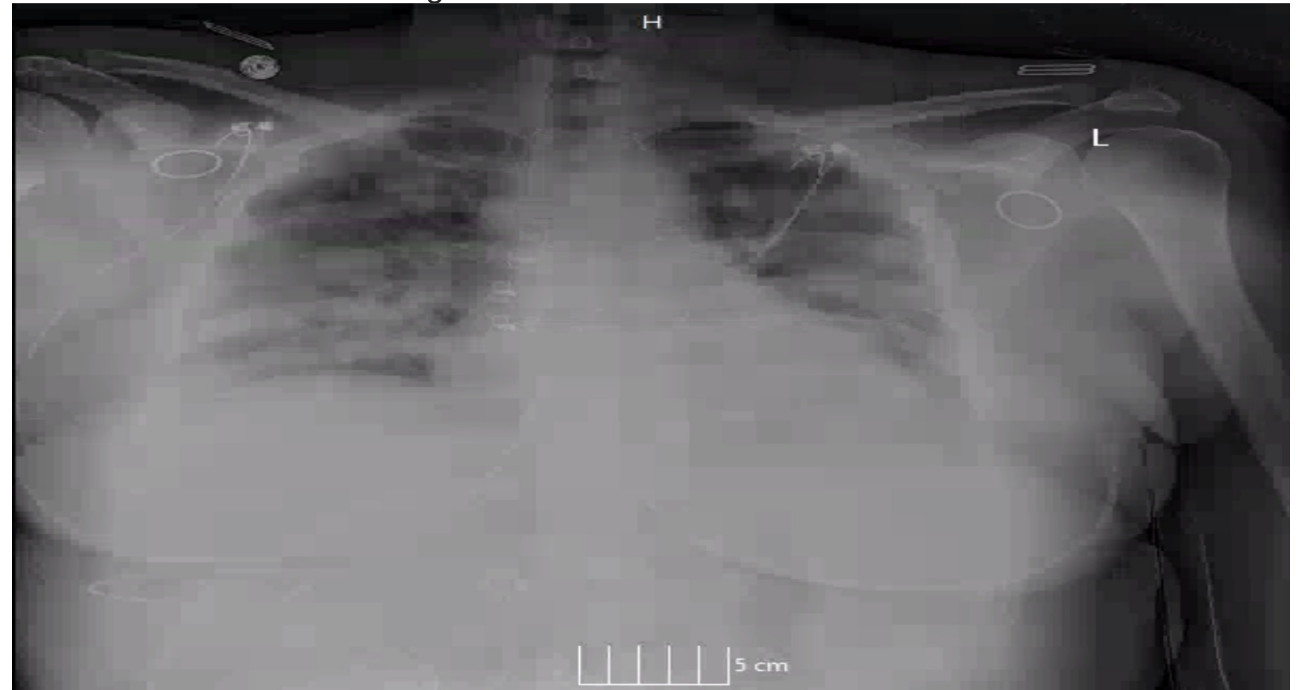
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- Epidural blood patch (EBP) is the definitive treatment for severe manifestation of post dural puncture headache (PDPH) not responsive to conservative management with caffeine and analgesics
- The goal of an EBP is to patch a tear in the dura which is causing leakage of CSF by injecting blood into the epidural space in a sterile manner.
- EBPs are reserved and used for the most severe PDPHs, not responding to conservative management

Case report:

- 32 year old G8P5 with history of hypothyroidism, postpartum hemorrhage, gestational hypertension, rheumatoid arthritis who presented at 38 weeks due to IUGR
- An epidural was placed for labor analgesia after 3 attempts
- Patient began complaining of neck pain and headache which had no relief with Acetaminophen or Ketorolac
- (+) Postural component
- Acetaminophen + Butalbital + Caffeine was started with minimal relief
- Blood patch was performed with 20mL of blood injected into the epidural space
- Relief of headache was noticed soon thereafter
- Patient was discharged to home 2 hours after blood patch asymptomatic, with no complications and vital signs all within normal limits

- The following AM, patient presented with respiratory distress with SpO2 in the 60s and a 103.9 temperature
- CXR showed bilateral perihilar infiltrates.
- UA showed moderate leukocyte esterase and >50 WBCs
- No neurological deficits were found on physical exam
- CT Angio was negative for pulmonary embolism
- Echocardiogram ruled out peripartum cardiomyopathy
- She was started on broad spectrum antibiotics Piperacillin/Tazobactam, Linezolid and was admitted to the MICU
- Blood cultures were positive for E. Coli bacteremia likely secondary to her urine
- Patient was discharged on PO antibiotics



Discussion:

- EBPs are generally safe
- A full aseptic technique should be utilized both for the epidural and the blood draw
- Complications of EBPs include back pain, nerve damage, bleeding and infection
- Rare adverse effects can include chronic adhesive arachnoiditis, subdural or spinal hematoma, seizure, cerebral venous sinus thrombosis, transient bradycardia, infection, intracerebral hemorrhage, facial nerve palsy, visual disturbance, incontinence, monoplegia, cerebral ischemia, cauda equina syndrome, pneumocephalus, formation of a calcific epidural mass, and scarring of the epidural space with distortion of epidural anatomy
- Our patient presented with high fever post EBP, necessitating further investigation
- It is critical to rule out epidural abscess which requires immediate neurologic evaluation, MRI of the spine and surgical decompression