INTRODUCTION

- Postdural puncture headache (PDPH) is one of the complications seen after spinal anesthesia and becomes a complex diagnosis if the primary condition is also known to cause similar symptomatology like pseudotumor cerebri (PTC) or idiopathic intracranial hypertension (IIH).
- These patients have therapeutic spinal taps to decrease intracranial pressure, which could lead to PDPH due to low cerebrospinal fluid (CSF) volume. Due to rarity of PDPH in pediatric PTC patients, effective treatment modalities are not clear.
- We are presenting a pediatric case with PDPH after a therapeutic spinal tap successfully treated with conservative management.

CASE DESCRIPTION

- A 13-year-old African American female referred to the Pain service with headache for blood patch by primary team. She was diagnosed with PTC a month ago.
- Symptoms: Frontal throbbing headache radiating to neck and right shoulder, associated with nausea, vomiting, dizziness, and photophobia. It would improve with lying flat, noise, and light would aggravate it. No other neurological deficits were present.
- Diagnostic dural tap was performed a month back with opening pressure of 39 cm H2O. Post discharge, she developed similar headache over the period of few days and presented to the Emergency Department. After initial workup, she was scheduled for another therapeutic spinal tap by Interventional Radiology. Acetazolamide and Lasix were started and she underwent second dural tap.
- Opening and closing pressures were 12.5 and 9.5 cm H2O respectively. She tolerated the procedure well and was kept in intermediate care unit for overnight observation. Few hours after the procedure, she developed headache of similar characteristics. It was treated initially with Ibuprofen and Tylenol with no improvement and hence Pain consult was given to evaluate the same. No new symptoms or changes in physical examination were noted. Due to similar nature of the headache, it was difficult to distinguish it from high versus low pressure headache. Considering the fact of recent procedure, she was started on conservative management. Bed rest, increased IV hydration and analgesics (Acetaminophen, Ketorolac, Meperidine) were initiated. Oral caffeine intake was encouraged. All diuretics were discontinued. Her symptoms resolved completely in 24-36 hours and she was discharged home after 4 days.

DISCUSSION

- Pseudotumor cerebri (PTC) is defined as the syndrome of increased intracranial pressure without any mass or obstruction with normal CSF composition1.
- Headache is the most common presenting complaint but nausea, vomiting, and visual changes are also frequently seen.2,3 Spinal tap is one of the common interventions performed for diagnostic and therapeutic purposes in these patients.
- As PTC is associated with headache, patients developing PDPH after therapeutic dural tap becomes a diagnostic dilemma. Pediatric PTC patients make it more difficult as communication gap and confusing clinical cues fogs the situation. Therefore, careful clinical assessment and interventions should be considered. Epidural blood patch (EBP) has been shown to be effective in but efficacy in patients with IIH is very limited due to extremely less number of cases4,5.

CONCLUSION

- Our patient was treated conservatively with forced IV and oral hydration, oral caffeine, analgesics and discontinuing diuretics.
- Complete resolution of symptoms was noted with conservative treatment within 2 days which might advocate for a longer conservative approach in pediatric population.

REFERENCES