Incidence and Management of Post Dural Puncture Headache (PDPH) at the University of Washington Medical Center

Emily Dinges MD, Shane Mandalia DO, Kayla Cayton, Laurent Bollag MD

Introduction:

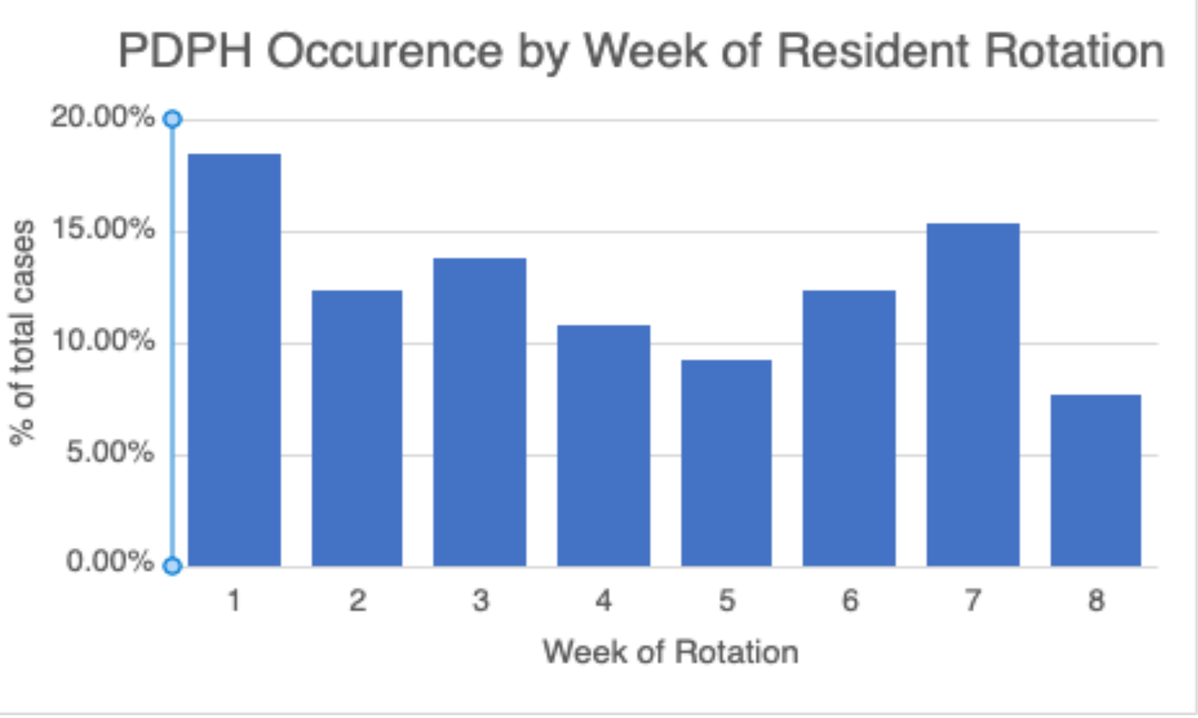
- Post Dural Puncture Headache (PDPH) is a recognized frequent complication of neuraxial labor analgesia. After accidental dural puncture, PDPH incidences with an epidural needle vary from 50-80% and 0.5- 10% with a spinal needle.[1]
- With more recent studies arising noting long term effects of PDPH including chronic back pain, chronic headaches, and post traumatic stress disorder, we performed an internal audit of our institutional PDPH incidence and EBP practice to evaluate for any temporal trends associated with PDPH and anesthesia trainees.

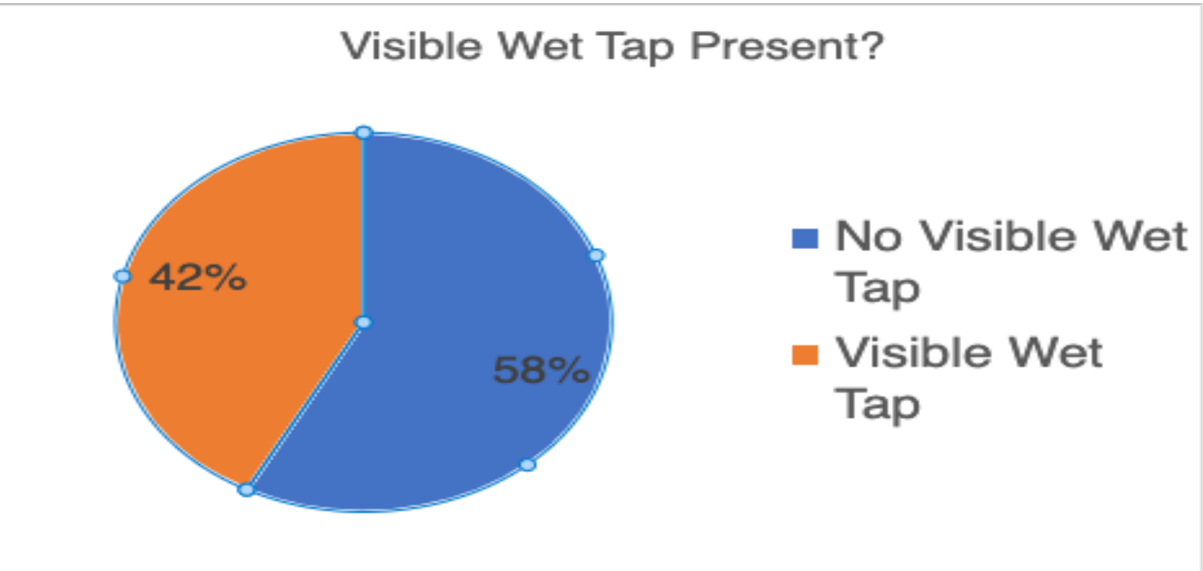
Methods:

- Review of an internal log spanning 19 months of incidence with known wet tap or patients who develop PDPH symptoms.

Results:

- PDPH Incidence 2.82% (66 from 2339 neuraxial procedures)
- EBP Incidence 68% (n=45, all during primary admission)
- 2nd EBP Incidence 9% (n=4)
- Average injected blood volume 22.2 ml (12-30 ml)
- Average injected volume for 2nd EBP 21.3 ml (18-22.5 ml)
- Of those who received EBP, 42% had visible wet tab (n=19) and 58% (n=26) did not (=uneventful CSE)
- Temporal trend down in PDPH rate based on experience of trainee except for week 7





SOAP Society for Obstetric Anesthesia and Perinatology

SOAP 2023 Annual MEETING
NEW ORLEANS | MAY 3-7

Conclusions and Next Steps:

This audit aimed to compare local practice with the published literature. Our local incidence of PDPH is 2.82% is in line with comparable (teaching) institutions.

Anecdotally, wet taps happen more frequently at the beginning of new resident rotations. Perhaps residents tend to get too overzealous towards the end of the training block prior to obtaining required numbers needed to become competent with a procedure which would allow opportunities to improve.

High proportion of patients who underwent EBP had no witnessed wet tap, this could be due to more medically complex patient population treated at our tertiary referral center; common comorbidities included migraine, pre-Eclampsia, and anxiety.

This retrospective data set may under-report events due to incomplete reporting of witnessed wet taps and failure to capture patients who developed PDPH after hospital discharge. Further, prospective analysis is underway.

References: 1- Chestnut's Obstetric Anesthesia: Principles and Practice. 2014:Fifth ed. 713–38.