

“Pseudo” post-dural puncture headache!

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To the Editor:

Post-dural puncture headache (PDPH), a common distressing subjective sequela of central neuraxial blocks secondary to a persistent cerebrospinal fluid (CSF) leak-induced low intrathecal pressure state [1], usually has a clear temporal association between the dural puncture and clinical presentation. We present an unusual case wherein a contentious occupational history resulted in a typical PDPH scenario following an uncomplicated thoracic epidural analgesia (TEA).

A 25-year-old woman (weight 52 kg, height 164 cm, ASA physical status I) underwent open hiatal hernia repair under general anesthesia (GA) supplemented with TEA (T7–T8 skin–epidural distance 4.1 cm, ‘tunnel-secured’ epidural catheter, skin position 8.0 cm). A patient-controlled analgesia pump was installed for postoperative analgesia. Forty-eight hours postoperatively, the patient complained of neck rigidity and fronto-occipital headache, which was aggravated with sitting position. Although lying supine, rehydration (2–3 l/day), non-opioid analgesics, and reassurance reduced the headache, her neck rigidity persisted. The physician consulted the attending anesthesiologist for a decision on epidural blood patch (EBP)

application because the conventional treatments did not improve the patient’s symptoms. Interestingly, the concerned anesthesiologist confirmed a clean first-attempt thoracic epidural and reported unexplained intraoperative sweating as the only untoward event during the uneventful 2.5-h surgery. This information prompted a reevaluation of the patient’s history. She worked in an international business process outsourcing (BPO) call-center with a predominant night-shift work pattern. A recent history (2 years) of continual headache (last episode, 3 months previously) and cervical aches was revealed. In addition, she was alcohol dependent (moderate to heavy, 5 years). Interestingly, the headache subsided once she quit her job and resumed drinking alcohol. In view of her suggestive history, the decision for EBP was abandoned, a cervical collar was applied, and specific management for possible alcohol withdrawal effects [diazepam-based anxiolysis, thiamine (100 mg/day), NSAID (slow-release diclofenac)] was initiated. She recovered within 36 h and was discharged home uneventfully.

Although inadvertent dural puncture with the epidural needle occurs in 1–2 % of thoracic epidurals, more than 70 % of cases experience symptoms/signs of PDPH [2], with a greater propensity of negative clinical effects in young patients [3]. In our case, the patient neither revealed her recent history of alcoholism/headache nor was it elicited specifically during the preoperative evaluation. Critical deconstruction of the patient’s history reflected a typical work-related morbidity continuum. Interestingly, the residual headache that remained even after alcohol abstinence and a reasonable rest period improved once she resumed regular alcohol intake.

The burgeoning call-centers, which lure young pre-graduates into stressful work (repetitive, intensive, prolonged), have occupation-related health implications

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(acidity, headaches, sleep disturbances, anxiety, stress, alcoholism/smoking, over-the-counter medicine misuse, musculoskeletal pains (cervical aches), family maladjustments) that are especially pronounced in young women [4]. The Indian sociocultural nuances make it difficult for young women to otherwise become alcohol dependent. The conundrum of signs/symptoms following TEA suggest dural puncture until proven otherwise, and EBP is preferred, keeping in view a larger dural rent. Our case is probably the closest fit to the diagnosis of ‘pseudo-PDPH’ as a complex intermix of occupation-related neck ache, a possible case of subacute alcohol withdrawal syndrome (headache, irritability, unexplained sweating during GA) [5], sleep disturbances (insomnia), and overriding pointers to inadvertent dural puncture following TEA, which led the APS team to a diagnosis of PDPH.

In conclusion, our case elucidates the importance of relevant preoperative history elicitation vis-à-vis the patient’s occupational background, critical subjective communication with the attending anesthesiologist, and objective confirmation of ‘no dural puncture’ status (negative epidural saline

patch test) to ward off adverse implications associated with a wasteful invasive EBP intervention for a ‘pseudo-PDPH’ situation.

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