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POST-DURAL PUNCTURE HEADACHE
FOUR YEARS REVIEW OF A TERTIARY MATERNITY HOSPITAL IN QATAR

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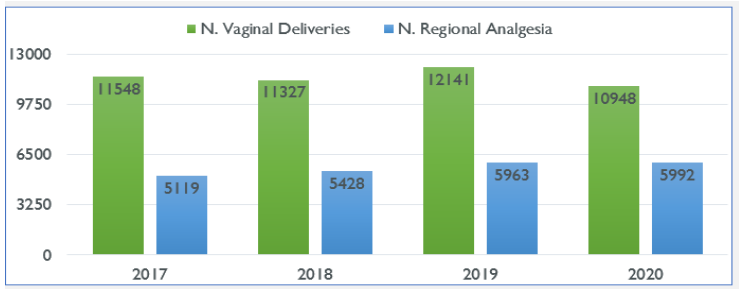
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Introduction

Post-dural puncture headache (PDPH) following accidental dural puncture (ADP) with an epidural needle is a well-known complication for women receiving neuraxial analgesia(NA). Rates of ADP with an epidural needle are estimated to be 0.19– 3.6%, with approximately 60% of these women developing PDPH.

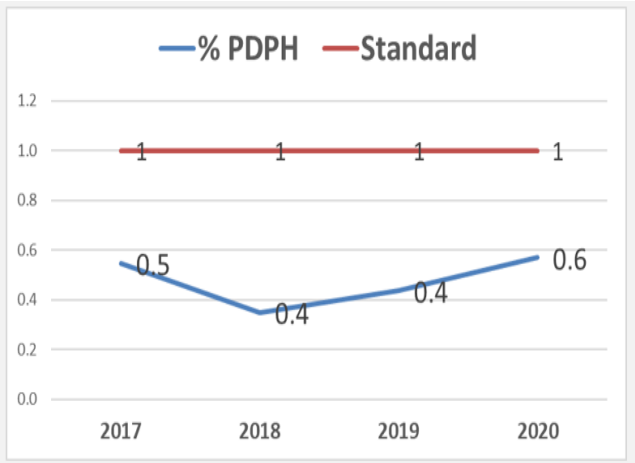
Methods

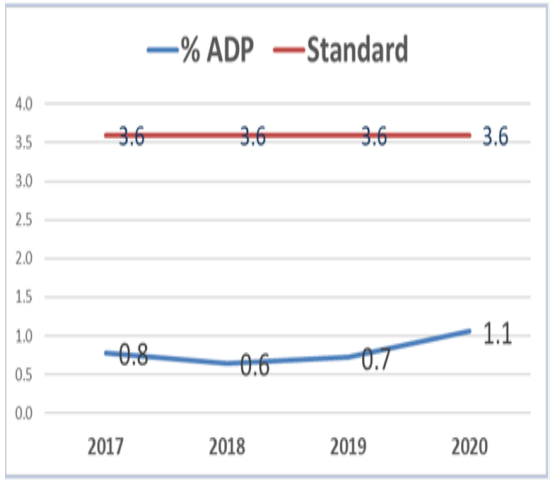
Following approval of our local audit committee, we reviewed 4 years of our practice to benchmark our hospital with international standards. We conducted a retrospective audit from 1 January 2017 to 31 December 2020 of all women who received NA and looked at the rate of epidurals, incidence of ADP and PDPH. We also examined how we treated PDPH patients and analyzed the rate of epidural blood patch (EBP). As in 2020, we established a telephonic 4-6 weeks patient follow up, we evaluated the outcome of patients who received EBP and patients who were treated conservatively.



Results

A total of 45,964 vaginal deliveries were recorded during that period of which 22,502 received NA which corresponds to an average of 469 epidurals per month. Epidural rate has slowly increased during the four years review: 44% in 2017, 48% in 2018, 49% in 2019 and 54% in 2020.The incidence of witnessed ADP was found to be 1% and the PDPH rate to be 0.6%. Conservative management as in regular analgesia with paracetamol and NSAIDs was used in two thirds of PDPH patients. One third of PDPH had moderate to severe symptoms requiring EBP. Of the 2020 PDPH patients followed up, all were found to be free of symptoms in the follow up.





Discussion

Our audit found the overall incidence of witnessed ADP was 1% and the incidence of PDPH was 0.6% which is in line with international standards. Regular analgesia with paracetamol and NSAIDs was adequate for patients with minor symptoms but when patients complained of moderate to severe symptoms, an EBP was needed. Because PDPH does not invariably follow ADP and PDPH may resolve with multimodal pain relief medications, it is our practice to defer performing an EBP until at least 48 hours following ADP. A survey of UK practice showed that many other units also delay performing EBPs until conservative measures have been shown to be inadequate. EBP must be performed meticulously to avoid complications. Because of the incidence of success of only 70%, and the risk of repeated ADP, blood patches should only be performed by an experienced anesthetist. In our review, there was never the need for a second EBP.

References

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2. Boonmak P, Boonmak S: Epidural blood patching for preventing and treating post-dural puncture headache. Cochrane DatabaseSyst Rev 2010;(1):CD001791