Post-Dural Puncture Headache Following Spinal Anaesthesia: Comparison of 25g Vs 29g Spinal Needles

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Objectives: To compare the incidence of post-dural puncture headache (PDPH) following spinal anaesthesia with a 25G and a 29G needle.

Methods: One hundred ASA I or II patients aged 25 to 45 years who were to receive spinal anaesthesia to undergo subumblical surgery were included in the study. Patients were randomly divided into two groups, group I received spinal anaesthesia with 25G Quincke point needle and group II received spinal anaesthesia with 29G Quincke point needle. Difficulty in localising the space and time taken to administer spinal anaesthesia were noted. Post-operatively incidence and severity of headache, backache and any auditory symptoms were recorded.

Results: PDPH occurred in 12 (24%) patients in the 25G group and two (4%) patients in the 29G group. Incidence of backache was also significantly higher in the 25G group. Two patients in the 25G group complained of impaired hearing. However, the total time taken to administer spinal anaesthesia and number of redirections of the needle to locate sub-arachnoid space were significantly more in the 29G group.

Conclusion: Spinal anaesthesia with a 29G needle reduces the incidence of PDPH in young adults. However, it is technically more difficult and time consuming to give spinal anaesthesia with a 29G needle than with a 25G needle.