

Clinical Research Surgical

The Sensory Distribution of the Penile Dorsal and Ventral Nerves - Implications for Effective Penile Block for Circumcision

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INTRODUCTION

Regional anaesthesia for circumcision is often used either for post-operative analgesia or to perform the procedure without the need for general anaesthesia (GA). The penile dorsal nerve block (PDNB) has become the standard technique. However, this technique has not been standardised and may vary from a solitary infra-pubic injection or the latter combined with ventral infiltration or a ring block. Urologists in clinical practice commonly find difficulties with this form of regional anaesthesia as the efficacy of the block may vary.

METHODOLOGY

In adults electing to undergo circumcision under local anaesthetic, sensation was tested prior to and following infiltration of the dorsal aspect of the penis and then again after infiltration of the ventral aspect. After 2 minutes the area of anaesthesia was mapped out using pin-prick sensory testing.

RESULTS

A total of 13 patients were included in the study. Mean age was 47 (range 19-74). Ten of 13 (77%) patients showed a similar pattern of sensory distribution. Following the dorsal nerve block, the dorsal aspect of the shaft of the penis and all of the glans penis became insensate. The ventral aspect of the shaft remained **sensate** up to and including the frenulum.

CONCLUSION

For consistent successful local anaesthesia of the foreskin a dorsal block must be given. This should be combined with ventral infiltration at the site of incision. This method will avoid inconsistencies and allow pain free circumcision under LA for most adults.