

Local Anaesthetic Circumcision – Yes or Ouch?

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Abstract:

This audit retrospectively reviews the success and patient acceptability of performing adult circumcision under local anaesthesia. Data were collected on 113 men reviewing complications and hospital admission, and telephone follow-up regarding bleeding, pain, general wellbeing and satisfaction with the procedure.

No specific intra- or post-operative complications were encountered. Eleven patients needed augmentation of local anaesthesia during the procedure. Two ASA 3 patients, a 92 and an 86 year old, required overnight hospital admission. Telephone follow-up in 64 patients revealed no further problems, and 63 were very satisfied with the procedure. We believe this audit confirms the safety and acceptability of local anaesthetic circumcision, and that its use should be recommended in less fit patients from a safety aspect, and readily offered to all from a satisfaction and health economic perspective..

Introduction

Whilst circumcision is an ideal operation for the day surgery setting¹, a number of patients may not be suitable for day case general anaesthesia. This may be due to co-morbidities or social circumstances. Over the past number of years we have offered such adult patients the choice of surgery as day cases under local anaesthetic, rather than needing to be admitted for their operation. We present an audit of the results of this care.

Patients and methods

We reviewed the records of adult patients undergoing circumcision under local anaesthesia in our departments for the last 10 years. All patients over the age of 35 years referred for circumcision were encouraged to consider having the operation in this way. Anaesthesia was by a combination of dorsal nerve and ring block, using a mixture of lidocaine 2% and bupivacaine 0.5%. Topical anaesthetic was also applied around the base of the penis 10 minutes prior to injection if requested by the patient. Patients then underwent a standard circumcision, as usually carried out by the particular surgeon, either by scalpel, scissors or bipolar scissors. Review of data and outcomes included age, ASA status and body mass index, the need for supplementation of local anaesthesia intra-operatively, unanticipated overnight admission, and the results of post-operative telephone follow up within 24 hours of their procedure.

Results

113 circumcisions were carried out under local anaesthesia over the period of review which equated to 61% of the total number of patients over the age of 40 undergoing this procedure. Patient ages ranged from 22 to 94 years with a mean of 60 years, and our experience was that most patients below the age of 35 were reluctant to consider the operation without general anaesthesia. 19 patients had a BMI greater than 30. Sixty one patients had an ASA score of 1, 42 an ASA of 2 and 10 of 3; these included a number of patients with either significant ischaemic heart or chronic pulmonary disease, or insulin dependent diabetes.

There were no intra- nor post-operative complications. Eleven patients (10%) needed further local anaesthetic during the procedure, but had been warned of this possibility before commencement. Two patients (1.8%) required in-patient care post-operatively, 92 and 86-year-old ASA 3 patients, one with nausea and one felt to be generally unsteady.

Telephone follow-up data was available in 64 patients, assessed within 24 hours of the surgery. Overall wellbeing was reported as very good in 35, good in 25 and reasonable in 4. A small amount of bleeding occurred in 11 and a moderate amount in 2. Pain was scored as not present in 42, mild in 18 and moderate in 4. All 63 who answered

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liked being treated as day cases. Sixty three reported themselves very satisfied with the care episode and 1 was satisfied.

Discussion

We believe these results show the potential benefits of local anaesthetic circumcision, in terms of low complication and admission rates, and high patient satisfaction. Although scant, previous reports in the literature have also shown similar very acceptable results for this technique^{2,3}, but our impression is that it has not been adopted for widespread use. Whilst the majority of circumcisions nationally are already performed as day surgery, the introduction of a local anaesthetic circumcision service has enabled our patients to be moved out of the day surgery unit to either a procedure room or a peripheral community hospital. This has freed-up valuable time within our day surgery theatres enabling more complex surgery to be transferred from the inpatient environment to the day surgery unit. This has significant economic advantages to the healthcare community, but also major benefits for the patient from the point of view of anaesthetic risk, avoiding in-patient admission and high satisfaction. The success of this technique is such that we advocate offering the option of a local anaesthetic procedure even to those in whom a general anaesthetic

would be acceptable, and positively promoting it in those less fit, or without the social support, for day case general anaesthesia. Although 13 patients reported post-operative bleeding with telephone assessment, this was only classified as "mild", and manageable by themselves.

The local anaesthetic circumcision service in Torbay has developed significantly since its introduction. Initially it was reserved for patients who were considered unsuitable for general anaesthesia, however increased surgical enthusiasm for the technique, education of urology trainees and the development of a dedicated local anaesthetic service in a community hospital have all served to significantly increase the proportion of patients undergoing circumcision under local anaesthesia.

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