Introduction

Paediatric tonsillectomy, one of the most frequent UK operations, causes post-operative pain, as well as potential bleeding complications.

BiZact™ (Medtronic) is a bipolar device employing energy and pressure to ligate vessels. We present the first UK prospective feasibility study in paediatric patients undergoing BiZact™ tonsillectomy.

Methods

12 paediatric patients (3-15 years; mean 6.5 years) underwent BiZact™ extracapsular tonsillectomy for obstructive and/or infective indications, performed by either a consultant (A. Taghi), SpR or SHO in a tertiary paediatric otolaryngology centre.

Exclusion criteria included those children with co-morbidities such as Down’s Syndrome, craniofacial abnormalities, known bleeding disorders or heart disease.

All received a standardised analgesia protocol on discharge.

Pain was measured daily for 14 days on a standardised visual analogue scale (VAS) and the patients were followed up 30 days post-operatively.

Outcomes

The primary outcome was severity of post-operative pain following BiZact™ tonsillectomy measured on a VAS.

Secondary outcome measures included mean operative time, operative blood loss and post-operative primary and/or secondary haemorrhage.

Results

Mean VAS pain score was 3.52, peaking at day 4. This compares favourably with VAS reported in conventional tonsillectomy studies. 1,2 Kim et al2 reported mean pain as 6.4 VAS on day 1 & 5.3 on day 7. Warnock et al1 report a mean VAS of 6.6.

Mean operative time was 2.09 minutes per case, with 0ml blood loss in all cases.

No delayed discharges or primary/secondary complications were reported.

Conclusion

BiZact™ paediatric tonsillectomy can be a safe and efficient technique.

We demonstrated no blood loss, no complications and low pain scores. Further studies are required to demonstrate conclusive advantages over conventional techniques.

Selected References

2. Kim MS, Choi HG, Park EK, Kim SY, Kim JH, Park