

Microsurgical tonsillectomy with bipolar dissection

Written by Salman Ali - Last Updated Sunday, 15 June 2014 18:11



Salman Ali, MD,

Otorhinolaryngologist. Athens, Greece

Microsurgical tonsillectomy with bipolar dissection is a combination of two otolaryngologic surgical techniques. Microsurgery had its inception in otology and bipolar cautery has been extensively used in head and neck surgery. Both techniques are applicable in tonsil surgery [1].

The use of the surgical microscope affords excellent visualization of the tonsil and adjacent structures making possible the precise use of the bipolar electrocoagulator. Blood vessels can be carefully identified, in most cases, and cauterized before being sectioned, reducing to a minimum and at times completely eliminating intra-operative blood loss [1].

Increased magnification limits excessive tissue tearing and traction as well as thermal injury, thereby reducing post-operative pain and cicatrix [1].

Hesham A. (2008) compared bipolar diathermy with cold dissection in paediatric

Microsurgical tonsillectomy with bipolar dissection

Written by Salman Ali - Last Updated Sunday, 15 June 2014 18:11

tonsillectomy. For this reason one hundred and fifty children were randomized equally into bipolar diathermy tonsillectomy (BDT) and cold dissection tonsillectomy (CDT). Operative time, operative blood loss, postoperative pain, diet intake, activity level and complications were compared in the 2 groups. The 2 groups were comparable in age and sex distribution. Operative time and blood loss was significantly less in the diathermy group.

No significant difference in the postoperative pain except on the 3rd day in which the cold dissection group showed significantly lower pain score. Mean percentage of diet was significantly higher in the diathermy group on the 1st day. No significant difference between the 2 groups in terms of postoperative activity and complications.

BDT is a safe technique of tonsillectomy. There is significant less operative time and blood loss with similar morbidity compared to CDT, so it can be used safely in children.

References

1. Andrea M. Microsurgical bipolar cautery tonsillectomy. *Laryngoscope*.1993 Oct;103(10):1177-8.
2. Hesham A . Bipolar diathermy versus cold dissection in paediatric tonsillectomy. *Int J Pediatr Otorhinolaryngol* 2009 Jun;73(6):793-5. Epub 2008 Nov 28