REPORT OF A NATIONAL SURVEY OF TONSILLECTOMY AND THE RECOMMENDATION FROM BAO-HNS*

The report was compiled from the information received from individual hospitals following a questionnaire from DoH/BAO-HNS enquiring about the rate of primary and secondary haemorrhage following tonsillectomy ± adenoidectomy over two 5-month periods (1 July to 31 October in 2000 and 2001). The period in 2000 represents "re-usable tonsillectomy instruments" and the period in 2001 represents "single-use tonsillectomy instruments".

Altogether 142 forms were received. However, only 44 forms (from 44 different trusts) were analysed. These forms had complete data on the total number of tonsillectomies, number and rate of primary and secondary haemorrhage for the 5-month period in yr2000 and yr2001. The others were excluded because the data were either incomplete or considered to be unreliable.

A number of limitations with the retrospective audit were identified. Many hospitals could not separate tonsillar from adenoidal bleed. Some hospitals share on call with the neighbouring trusts and hence the data of secondary haemorrhage were not reliable. The overall figures from any hospital represent the combine results of several surgeons, using a variety of techniques. It was difficult to tease out the 'bad techniques'.

Overall, there was no increase in the rate of haemorrhage. There was also no increase in the rate of secondary haemorrhage that required returned to the OT. In fact, the rates of primary and secondary haemorrhage in yr2000 and yr2001 in England were similar to that in Scotland. However, there were at least 2 reported deaths due to secondary haemorrhage since the introduction of the single use instrument.

	Yr2000 (%)	yr2001 (%)
Primary haemorrhages returned to OT	0.43%	0.96%
Readmissions for secondary haemorrhage	4.68%	5.09%
Secondary haemorrhages returned to OT	0.85%	0.78%

In 18 trusts the primary haemorrhage rate increased for the period when single use instruments were used compared to 12 trusts where the primary haemorrhage rate declined. In 24 trusts the secondary haemorrhage rate increased whereas in 17 trusts it decreased. However, the difference in the complication rates of individual hospitals between yr2000 and yr2001 was not as high as the variation in complication rates amongst the different hospitals in any particular year.

In order to identify the reasons for the high rate of secondary haemorrhage in some hospitals, they were contacted by telephone to enquire about the surgical techniques. The early versions of the disposable diathermy forceps were definitely associated with an increased post-operative haemorrhage rate. Also, it appeared that trusts with a high secondary haemorrhage rate were using 'a lot of bipolar diathermy' and often as a dissection tool, in particular among the junior staff. One reason some trusts may have had a lower haemorrhage rate following the introduction of the single use instrument was that bipolar diathermy was abandoned at an early stage.

In view of the findings, the BAO-HNS has offered the following advice to the members:

1. The risk of tonsillectomy should be carefully explained to the patients/parents, in particular post-operative haemorrhage, when a patient is counselled for surgery.
2. All surgeons who undertake tonsillectomy should monitor their own results.
3. All trainee surgeons should be taught during their training to secure haemostasis using ties.
4. SHOs performing tonsillectomy should be supervised by a more senior surgeon.
5. Bipolar diathermy should be used with caution especially if it is used as a dissection tool.

**The full report on the tonsillectomy survey is available on the BAO-HNS website*