The Journal of Laryngology and Otology
August 1993, Vol. **107**, pp. 706–708

Same-day tonsillectomy

A. K. TEWARY, F.R.C.S., A. R. CURRY, F.R.C.S. (Coventry)

Abstract
Tonsillectomies have been performed on a same-day basis in Coventry for the past three years. We report our experience with this technique which has gradually evolved over the last ten years. The procedure is described in detail and the results of the first two years have been analysed. In common with the experience of others, it is possible to perform tonsillectomies safely on a same-day basis.

Key words: Tonsillectomy; Day care

Introduction

The practice of same-day tonsillectomy has gradually evolved over the last ten years in Coventry (Figure 1).

The early years

The experience started in 1983 when patients were admitted on the day of operation instead of a day earlier, as was the practice at that time. They were operated upon as inpatients but after six to eight hours observation about a third, who were considered fit, were allowed home.

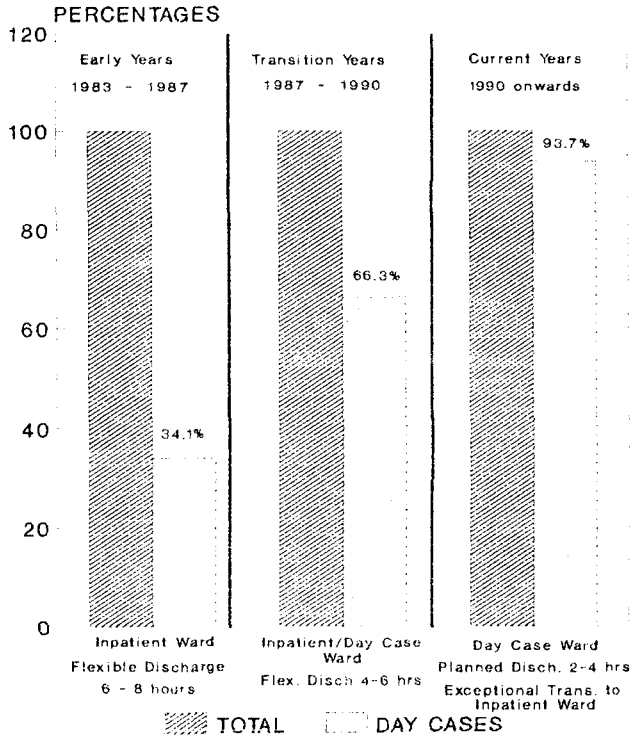

FIG. 1
Day case tonsillectomy.

The transition years

Following the establishment of a dedicated day surgery unit in 1987, some children were admitted to it and operated upon there but were then transferred to the inpatient ward where the nurses were more familiar with post-tonsillectomy care. A flexible discharge policy was followed and about two-thirds of these patients were discharged after four to six hours of observation.

The current years

Since 1990 children are admitted to the day surgery unit as planned day cases. They are operated upon there and after two to four hours of observation are discharged if found fit. A small proportion of patients considered unsuitable for discharge are transferred to the inpatient ward for overnight observation.

Method

Pre-operative organization and assessment

Children referred for possible adenotonsillectomy are

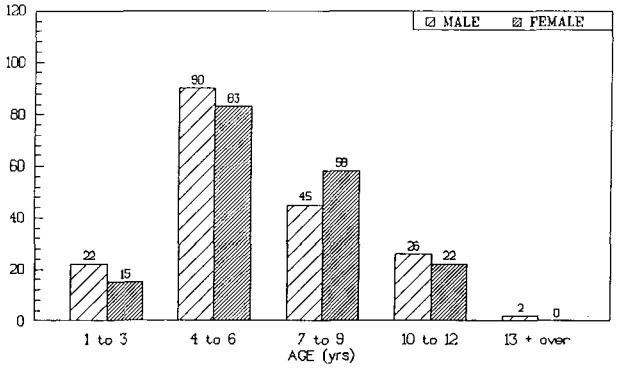

FIG. 2
(Adeno) tonsillectomy (grommets) 1991, 1992 (n = 363)

From the ENT Department, Walsgrave Hospital, Coventry.
Accepted for publication: 6 March 1993.

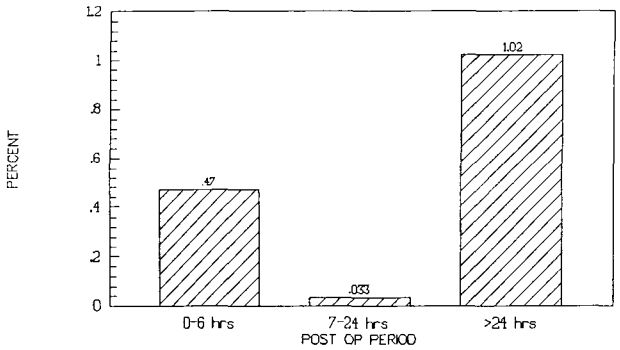

FIG. 3
Incidence of haemorrhage (n = 8889)

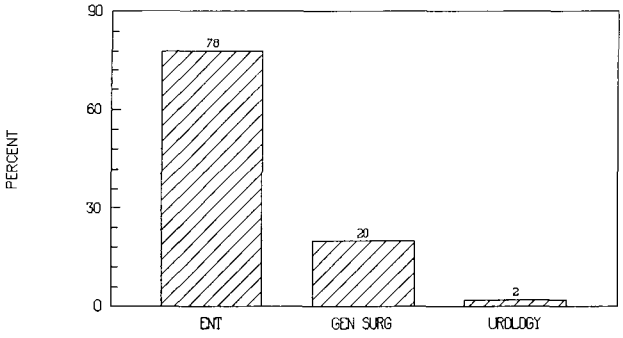

FIG. 4
Day case operations 1991–92

seen in a clinic which is attended by a senior nurse from the day surgery unit. Once a decision for (adeno) tonsillectomy is made any factors which would make a day-case operation inappropriate are looked for. Children with associated medical conditions e.g. heart disease or asthma which would make anaesthesia less than straightforward, are considered unsuitable. Both parents are expected to be available to look after the child at home at least on the night of the operation. Any social or domestic circumstances causing difficulty in accessing the hospital are taken into consideration.

A mutually convenient date for the operation within the next few weeks and a date for the post-operative visit are finalized. The parents are given a detailed description of the procedure for admission, outline of operation, recovery and normal post-operative care. They are given a printed booklet, explaining the same, to read at leisure. This booklet contains information explaining the need and purpose of the operation, psychological preparation of the child, procedure for admission, organization of the day unit and common problems after operation and their management. They are instructed to bring an adult other than the driver for the journey home to have the same arrangement at home. It contains information about the method of getting in touch with the ENT ward, the doctor on call and has the home telephone number of the operating surgeon. They are instructed to see their general practitioner for any illness prior to the operation and not to bring the child for operation in case of fever.

Admission and operation

All children are assessed, admitted and consented for the operation by the senior anaesthetist and the operating surgeon. The operating list is organized so that tonsillectomies are done first followed by minor operations. Anaesthesia is induced with propofol and suxamethonium followed by endotracheal intubation and is maintained by nitrous oxide, halothane and oxygen. At commencement of anaesthesia a 25 mg diclofenac sodium suppository is given. The tonsils are removed by dissection and bleeding vessels are controlled with white silk ties and bipolar diathermy. They recover from anaesthesia in a fully staffed recovery room and are then transferred to their day unit bed where their vital signs are monitored and any signs of bleeding looked for. When fully recovered, they are given a drink followed by a light lunch. They are examined by the operating surgeon and anaesthetist prior to discharge. If there is concern about the safety of discharge they are transferred to the inpatient ward for observation. Instructions about pain control and the need to contact the ENT doctor on call or the operating surgeon at home if the child spits more than a spoonful of fresh blood or vomits stale blood, are emphasized again.

Children used to be seen four days following discharge but are now seen a fortnight later to ensure they have recovered satisfactorily.

Results

Records of all day-case tonsillectomies done in the first two years were reviewed (Figure 2). One hundred and sixty three children underwent tonsillectomy alone, 131 had adenoidectomy as well and 69 had adenotonsillectomy and insertion of grommets.

Six children had reactionary haemorrhage. Two were diagnosed before discharge and were transferred to the inpatient ward. One of these was bleeding from the tonsillar fossa and the other from the adenoidal bed. The child with adenoidal bleeding had tonsils and adenoids large enough to warrant histological examination. The child with tonsillar bleeding needed to return to theatre for its control.

Four patients returned to the hospital with bleeding within the first 24 hours following operation. Two of these were controlled with local and supportive measures and the other two needed to return to theatre. One of these was bleeding from the tonsillar site and the other from the adenoidal site.

Between the second and the eighth post-operative day five patients returned to the hospital with bleeding. All of these were controlled with local measures and antibiotics. One of these had also suffered a reactionary haemorrhage.

Discussion

Most episodes of reactionary haemorrhage occur early

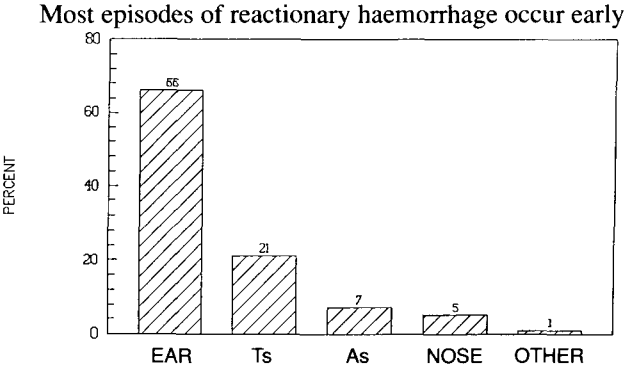

FIG. 5
ENT day cases (2–15 yrs) 1991–92

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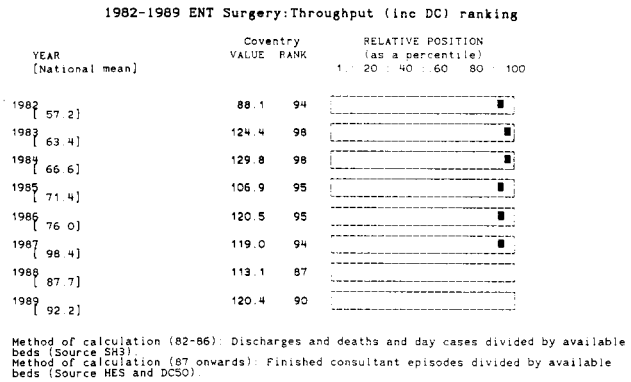

FIG. 6
IACC Time Series 1982–89.

in the post-operative courses and are noticeable before discharge. This has been the experience of other centres which undertake tonsillectomy as day cases. Maniglia *et al.* (1988) reported 1428 tonsillectomies, Reiner *et al.* (1990) 608, Segal *et al.* (1983) 892, Wagner (1991) 383, and Shott *et al.* (1987) 292, without any reactionary haemorrhage following discharge as day cases. Colclasure and Graham (1990) had one patient return with reactionary haemorrhage from a total of 3340 over eight years and Helmus *et al.* (1990) had two return out of 1088 tonsillectomies done over two years. The cumulative experience regarding the period of reactionary haemorrhage is summarized in Figure 3.

A large proportion of ENT operations are suitable for day-case surgery (Figure 1) and ENT provides the largest proportion of patients for day-case surgery (Figure 4). Most of these are minor procedures but a significant proportion in Coventry are tonsillectomies (Figure 5). The number of ENT day cases in Coventry has consistently been above the 90th centile of those performed in this country (Figure 6).

Parents find this arrangement very satisfactory. Those that have their other children operated as inpatients regularly comment on the convenience. Recovery from anaesthesia is rapid when propofol is used for induction and diclofenac sodium has been found very useful in controlling immediate post-operative pain.

This practice of same-day tonsillectomy has been a gradual evolution rather than a revolution. As confidence with safety has grown so the time children are kept in hospital has gradually decreased.

Good organization is the key to successful day-case surgery. Very short periods between pre-operative assessment and surgery, a day unit run by experienced and efficient staff, assessment before and after operation by a senior anaesthetist and the operating surgeon and provision of easily accessible back-up are all fundamental to a satisfactory outcome.

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Address for correspondence:
A. K. Tewary, F.R.C.S.,
7 Kingland Drive,
Old Milverton,
Leamington Spa, CV32 6BL.

https://doi.org/10.1017/S0022215100124193 Published online by Cambridge University Press