

Audit Analysis in: Adenotonsillectomy Overnight Hospital Stay

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ABSTRACT

Of the recent trends in ENT, the use of ambulatory surgery for adenotonsillectomy is gaining in popularity and acceptability. An audit analysis of this procedure, on the basis of no overnight hospital stay, is reported from King Fahad Hospital of the University, Al-Khobar (KFHU), Saudi Arabia. Patients who had their surgery performed and were discharged from the hospital on the same day, had no more complications than those who were conventionally hospitalised before and after surgery. Reactionary haemorrhage was not recorded in any of the 52 patients who were scheduled for same-day procedure and discharge. Only three patients (6%) needed provision for overnight hospital stay after the operation, because of fever in one patient, severe dysphagia in another, and the finding of a blood clot in the tonsillar fossae of the third patient. Suggestions are made for the selection of patients for day-case surgery.

In Saudi Arabia there has been a progressive improvement in health services over the past 20 years. The country now enjoys one of the most advanced medical services amongst the developing nations. However, this high quality care should be maintained, without jeopardising the patient's safety, at the lowest possible cost. Since adenotonsillectomy is one of the most commonly performed surgical procedures in children, the departmental audit decided to look into its rate of complication when performed as a day-case operation and to compare it with the rates seen using conventional methods, that is, when admitting a day before and discharging when considered safe. If the complications are comparable, then undoubtedly there will be great financial savings, and a reduction

in anxiety for both patient and parent as a result of not being hospitalised.

The main objective of this short audit analysis was to look into the rate and nature of complications resulting from adenotonsillectomy in children, without overnight hospital stay.

METHODS

Since the establishment of King Faisal Hospital at the University (KFHU) in 1981, a total of 3,100 adenotonsillectomies have been performed on children with a zero mortality rate¹. The policy adopted by the ENT department was to admit the children a day before surgery and keep them in hospital, for a minimum of 24 hours post-operatively.

The following features were looked into and analysed:

1. The incidence of reactionary haemorrhage. Reactionary haemorrhage was defined as a bleeding of sufficient severity to warrant a return to the operating room.
2. The percentage and nature of other complications of sufficient magnitude that an overnight stay became necessary.

In the 12-month period between June 1991 and May 1992, a total of 309 consecutive adenotonsillectomies were performed on children at KFHU, Al-Khobar. Two hundred and fifty seven patients were treated according to the existing policy. They were admitted a day before

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the operation and discharged after a minimum stay of 24 hours. Fifty-two patients were listed for admission, operation and discharge on the same day. Considering their fitness for surgery, the 52 patients, under this audit analysis, were subjected to full examination by the ENT surgeon and the anaesthetist a day before the operation. The patient's parents were informed that the child should fast from midnight, and be brought to hospital one hour before the operation for the necessary pre-medications. After surgery, and before leaving the hospital, parents were handed over the usual instructions that are given to all adenotonsillectomised patients.

RESULTS

No reactionary haemorrhage was reported in any of the 52 patients who were scheduled for adenotonsillectomy as same-day discharge. However, three children were detained overnight as one had severe dysphagia, the second became febrile, and the third had a blood clot in the tonsillar fossa. Accordingly only 6% of the patients needed provision for overnight observation before discharge the following day in excellent condition. The remaining patients were discharged eight hours after the operation without any problems. In the 257 patients who were hospitalised a day before and after surgery, two cases suffered from reactionary haemorrhage: one three hours after the operation and the other seven hours post-operatively.

DISCUSSION

In 1985, in its guide lines for day-surgery cases, The Royal College of Surgeons in England excluded the removal of tonsils and adenoids for fear of reactionary haemorrhage². However, concern over the rising cost of health care resulted in a number of centres moving to a same-day discharge policy³. This has been the main reason why many North American hospitals already perform adenotonsillectomy as a day-case procedure^{4,5}.

Health care institutions have two major objectives⁶:

1. To provide care of the highest possible quality.
2. To provide that care at the lowest possible cost.

In order to look into achieving these objectives at KFHU, this audit analysis was conducted in 52 children undergoing adenotonsillectomy, on a no overnight stay basis. It culminated in only 6% of them requiring hospitalisation overnight.

The criteria for patient selection and the guidelines for performing the operation without overnight hospital stay are outlined below.

Patient Selection:

1. Live within easy reach of the hospital
2. Have means of transportation
3. Parents have sound level of education

Hospital facilities:

1. Excellent emergency room facilities
2. Twenty-four hour blood bank services

Operative and post-operative precautions:

1. Meticulous attention to haemostasis
2. Close monitoring in the immediate post-operative period
3. Patients not to be discharged before the lapse of at least eight hours post-operatively, as reactionary haemorrhage is known to occur in the first eight hours post-adenotonsillectomy^{7,8}.

CONCLUSION

ENT units which observe the above criteria, and which closely monitor their patients and audit their results, are invited to consider the possibility of performing adenotonsillectomy as same-day discharge procedure.

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