

Management of peritonsillar abscess

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This retrospective study compared immediate operation of a peritonsillar abscess (quinsy tonsillectomy) with immediate incision and drainage or permucosal aspiration followed by interval tonsillectomy. The study consisted of 148 cases treated from 1976 to 1994.

Patient's ages ranged from 1 to 70 years (mean 28.7 years). There were 81 males and 67 females. Quinsy tonsillectomy was performed in 59 patients and permucosal aspiration or incision and drainage in 89 patients.

The results showed that quinsy tonsillectomy had no significantly greater complications than permucosal aspiration and incision and drainage. The procedure of quinsy tonsillectomy was less difficult than interval tonsillectomy and constituted a one-stage curative operation. Hospitalisation was reduced significantly ($p < 0.01$) when compared to interval tonsillectomy.

Introduction

Peritonsillar abscess (PTA) is the commonest complication of tonsillitis¹. Optimal management of PTA has been a controversial subject since Guy de Chaulic described drainage tonsillectomy in the 14th Century. The generally accepted classic treatment for PTA consists of permucosal aspiration or incision and drainage with systemic antibiotics followed by tonsillectomy after an interval of from

four to six weeks (interval tonsillectomy). Debate continues concerning optimal therapy in terms of morbidity and cost effectiveness.

Since 1970 quinsy tonsillectomy has been practised widely in many countries^{1,2,3}.

Patients and methods

Most patients attending the Department of Otorhinolaryngology of Shandong Provincial Hospital with suspected PTA underwent permucosal aspiration at the point of maximum fluctuance. Of the 148 patients with positive aspirates, 59 underwent quinsy tonsillectomy and 89 were treated by permucosal needle aspiration or incision and drainage.

The patient's age, sex, duration of symptoms, history of prior tonsillitis or PTA, temperature and white cell count were recorded. Aspiration was done using a 10ml syringe and an 18-gauge spinal needle. Incision and drainage were done through a standard incision in the superiolateral faucial arch. Tonsillectomy was performed under local anaesthesia within 24 hours of hospitalisation. Only the involved tonsil was removed.

Results

From 1976 to 1974, 148 patients with aspiration-proven PTA were treated by quinsy tonsillectomy, permucosal aspiration or incision and drainage. The patient's age ranged from 1 to 70 years (mean 28.7 years). There were 81 males and

67 females. Mean body temperature at presentation was 38.2°C (range 36.5°C to 40.6°C). The duration of symptoms averaged 8.2 days (range one to 60 days). The white blood cell count was found to be normal or slightly increased in 87 patients (59%) and greatly increased in 61 patients (41%).

The average blood loss for the 59 patients who underwent quinsy tonsillectomy was relatively scanty. Delayed bleeding was not found in the group. The total period of hospitalisation in the operative group average was 3.9 days (range 2-11 days). This was shorter than the average of 5.7 days hospital stay (range 2-15 days) of the patients in the non-operative group ($p < 0.01$).

TABLE I Summary of Results

PATIENTS	OPERATIVE GROUP	NON-OPERATIVE GROUP
* Patients with complete clinical information	38	52
Sex: male / female	18 / 20	28 / 24
Mean age (range)	26 (6-50)	27.6 (1-70)
Mean temperature (range)	38.6 (37.6-40.6)°C	37.9 (36.5-39.4)°C
Mean duration of symptoms in days (range)	8 (4-60)	6 (3-16)
Prior tonsillitis and abscess (%)	27 (71.1)	26 (50)
Hospital days mean days (range)	3.92 (2-11)	5.71 (2-15)

* Excluding 58 patients with incomplete clinical records.

TABLE II Long term effects of treatment

OUTCOME	OPERATIVE GROUP PATIENTS (%)	NON-OPERATIVE GROUP PATIENTS (%)
* Patients with complete clinical information	38	52
Recurrent pharyngalgia	10 (26.3)	
Pharyngoxerosis	7 (18.4)	24 (46.2)
Globus hystericus	0 (0)	18 (34.6)
Follow up (years)	1 (14)	2 (13)

* Excluding 58 patients with incomplete clinical records.

Discussion

The optimal management of PTA is still a controversial subject in otolaryngology. The generally accepted classic treatment for PTA consists of permucosal aspiration or

incision and drainage with antibiotics followed by interval tonsillectomy four to six weeks later.

The argument for tonsillectomy is that the recurrences are common^{2,4}. Fried and Forest⁵, however, stated that recurrent quinsy is rare and that tonsillectomy is unnecessary. Minja and Moshi³ found only three cases of recurrent quinsy among 42 patients previously treated for quinsy.

The great advantage of quinsy tonsillectomy is that it is a one-stage curative operation and provides immediate pain relief. The possible complications of haemorrhage, aspiration of purulent material and sepsis did not occur in this group, which indicates that these risks may be negligible.

In their previous study Minja and Moshi³ pointed out that the advantage of quinsy tonsillectomy was cost effectiveness because it reduces hospitalisation by half when compared with interval tonsillectomy.

Recent studies in Zimbabwe and elsewhere show that permucosal aspiration or incision and drainage with systemic antimicrobial therapy is gaining ground as the optimal therapy for PTA^{6,7,8}.

In the present study, long term effects were better in the operative group than the non-operative group. We consider that quinsy tonsillectomy is an

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