



ORIGINAL ARTICLE

Comparison of Post-operative hemorrhage and hospital stay in early and delayed interval tonsillectomy for quinsy.

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ABSTRACT... Objective: To compare post-op hemorrhage and hospital stay in patients with quinsy undergoing early and delayed interval tonsillectomy. **Study Design:** Randomized Control study. **Setting:** Department of ENT, Gajju Khan Medical College (GKMC) Swabi. **Period:** June 2018 to June 2019. **Material & Methods:** A total of 50 patients of Quinsy were randomly divided in to two groups equally. Group A including 25 patients underwent early interval tonsillectomy while in 25 patients of Group B, delayed interval tonsillectomy was done. **Results:** A total of 50 patients were included with age ranging from 15 to 41 years with mean age of 26.70±5.63 (mean±SD) years. There were 29 males and 21 females with male to female ratio of 1.4:1 respectively. Post-operative hemorrhage and side of bleeding between the two groups, was not significant (P Value= 0.555). The duration of hospital stay was less in group A as compared to group B with p value of 0.0003. **Conclusion:** In quinsy there is no difference in post-op hemorrhage between early and delayed interval tonsillectomy while hospital stay is shorter in early as compared to delayed interval tonsillectomy.

Key words: Delayed Interval Tonsillectomy, Early Interval Tonsillectomy, Hospital Stay, Post-Op Hemorrhage, Quinsy.

INTRODUCTION

Tonsillectomy is one of the commonest ENT surgical operations performed by otolaryngologists. Quinsy or Peritonsillar abscess presents as ENT emergencies. Quinsy is a localized accumulation of pus in the peritonsillar tissues that form as a result of suppurative peritonsillitis.¹ On culture of aspirates 60% to 80% yields positive including aerobic and or anaerobic bacterial growth. The highest incidence of quinsy was observed in the second and third decade of life.² Treatment of Quinsy is considered to be hospitalization requiring medical therapy and surgical intervention. The surgical treatment involves needle aspiration, incision drainage and abscess or interval tonsillectomy.^{1,3} The procedure of tonsillectomy done in quinsy patient on emergency basis without prior needle aspiration and incision & drainage is known as abscess /quinsy tonsillectomy.⁴ On the other hand if the procedure is delayed for 6-8 weeks after the needle aspiration and incision and

drainage it is called interval tonsillectomy. Quinsy tonsillectomy has been reported to be more cost-effective than the delayed interval tonsillectomy because it prevents recurrence and the overall hospital stay is shortened.^{1,2,5} Hemorrhage is one of the commonest complications of tonsillectomy despite of the efforts of surgeon but life threatening hemorrhage never occurs.^{6,7}

The proponents of quinsy tonsillectomy as one of the definitive treatment claim that this procedure shortens hospital stay and that it is no more hazardous than the delayed interval tonsillectomy.⁸ The objective of the study is to compare the postoperative hemorrhage and hospital stay in quinsy undergoing early and delayed interval tonsillectomy as in early in one setting quinsy will be treated completely with short hospital stay and less complications.

MATERIAL & METHODS

This was a Randomized control study conducted

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at the ENT Department of Gajju Khan Medical College (GKMC) Swabi from June 2018 to June 2019. A total of 50 patients of Quinsy were randomly divided into two groups equally. Group A including 25 patients underwent early interval tonsillectomy while in 25 patients of Group B, delayed interval tonsillectomy was done. Patients who developed peritonsillar abscess for the first time of either sex with age limit of 10 to 50 years were included in the study while Patients who had established glandular fever, Diabetes mellitus, Bleeding diathesis, immunocompromised, tonsillar malignancy and Chronic systemic disease like TB, renal or liver disease were excluded. Informed written consent was taken from every patient the study was approved by ethical committee 126/LRH/MTI.

Demographic information like name, age and gender were obtained. A brief history and physical examination along with baseline investigations were carried out. Needle aspiration by 19-gauge needle with a 10-cc syringe and Incision & drainage by 15 size surgical blade was done applying 4% xylocaine solution. After that early interval tonsillectomy (tonsillectomy within week of incision drainage) and delayed tonsillectomy (tonsillectomy after 8 weeks of incision drainage) were carried out using the routine cold dissection method following the standard protocols. Outcome variables like post-operative hemorrhage, and total hospital stay were recorded and compared in both groups. Chi square test was applied for the comparison of the outcome parameters and P value obtained less than 0.05 was statistically considered significant.

All the results were represented as tables/charts. The data was stored and analyzed in SPSS

version 20.

RESULTS

A total of 50 patients were included in the study with 25 in each group. The age range was 15 to 41 years with mean \pm SD of 26.70 ± 5.63 years. There were 29 males and 21 females with male to female ratio of 1.4:1 respectively. Primary hemorrhage occurred in 1 case in each group while secondary hemorrhage occurred only in group B in one case. So post-op hemorrhage between the two groups was not significant (P value=0.555) as shown in Table-I.

In group A, the hospital stay less than one week was found in 20 patients (75%) and more than one week was in 5 patients (25%) while in group B, stay less than one week was in 7 patients (18%) and 18 patients (72%) had more than one week stay. Thus the duration of hospital stay in group A was less as compared to group B with P value of 0.0003 as shown in Table-I.

DISCUSSION

In this study 50 cases of quinsy that underwent early and delayed interval tonsillectomy were included. After 6 weeks of abscess formation the peritonsillar tissue plane is obliterated making dissection very difficult and resulting in increased incidence of post-op complications and decreased oral intake. Early interval tonsillectomy is defined as tonsillectomy done within a week of incision drainage and antibacterial therapy when the fibrosis in the tonsillar bed has not yet developed while Delayed interval tonsillectomy means tonsillectomy done after 8 weeks of incision drainage and parenteral antibacterial therapy.

Variables	Status	Group A (n=25) with %	Group B (n=25) with %	P-Value
Post- Op hemorrhage	No bleeding	24 (96%)	23(92%)	0.555
	Primary heamorrhage	1(4%)	1(4%)	
	Secondary heamorrhage	0	1(4%)	
	Ipsilateral heamorrhage	1(4%)	0	
	Contralateral heamorrhage	0	2(8%)	
Hospital stay	Less than one week	20 (80%)	7(28%)	0.0003
	More then one week	5 (20%)	18(72%)	

Table-I. Post-op heamorrhage and hospital stay between the two groups.

In our study the age range was 15 to 41 years with mean \pm SD of 26.70 \pm 5.63 years which is comparable with Ahmad MM et al¹ and Javed M et al². While in study of Johnson et al³ quinsy most commonly occurred in the third and fourth decades of life. In another study by Herzon and Martin⁹ analyzed that quinsy can occur in age group 10-60 years, although it is most commonly seen in those aged 20-40 years.

In our study, 24 patients (96%) in group A and 23 patients (92%) in group B had no post-op bleeding. One (4%) case in group A and also one (4%) case in group B had suffered from primary hemorrhage while only one case (4%) of group B had secondary hemorrhage. The p value was 0.414 (statistically not significant) as observed in study of Ahmad MM et al¹, and Javed M et al² and Lehnerdt et al¹⁰ who compared post tonsillectomy haemorrhage of abscess and elective tonsillectomy group and the difference between the two was not significant (p value of 0.414, p=0.601 and p=0.056 respectively). In our study the hemorrhage in group A was from contralateral side in one patient while ipsilateral in two (8%) cases of group B which was same as Ahmad MM et al¹ while Giger et al¹¹ in their study observed ipsilateral hemorrhage in 5 patients (3.5%) and contralateral hemorrhage in 13 patients (9.3%), which showed the higher incidence of hemorrhage in the side contralateral to the abscess.

In our study the duration of hospital stay in group A was less as compared to group B with P value of 0.001 which is consistent with the study of Ahmad et al¹ (p value <0.001) and Javed M et al² (p value=0.001). Longer the duration of hospital stay greater the burden on the patient, financially and psychologically. Earlier studies tended to emphasize that Quinsy tonsillectomy is safe and cost-effective, than the interval tonsillectomy. Johnson RF et al³ found that there was no difference between the two strategies. However when they added on the second hospitalization for interval tonsillectomy, both found that there was a difference in hospital stay as well as lost time from work.

In our study most of the patients of group A required only single hospital admission with total hospital stay of 1 week in which both the immediate needle aspiration or I/D as well as early interval tonsillectomy were made possible in one setting. In addition it was more cost-effective than delayed interval tonsillectomy. The patients of group B had prolonged hospital stay of more than 1 week, due to second hospital admission for delayed interval tonsillectomy as part of their treatment.

CONCLUSION

Post-op hemorrhage in early and delayed interval tonsillectomy in quinsy is insignificant while hospital stay is shorter in early as compared to delayed interval tonsillectomy. Longer the duration of hospital stay greater the burden on the patient, financially and psychologically and absence from workplace thus early interval tonsillectomy in one setting is more cost-effective than the Delayed interval tonsillectomy.






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AUTHORSHIP AND CONTRIBUTION DECLARATION

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6	Allah Noor	Lit search, Analysis, Interpretation	