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Is routine histopathology of tonsil specimen necessary?

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ABSTRACT

Background: Tonsillar diseases are common in paediatric and adult otolaryngological practice. These diseases require tonsillectomy. Specimens are subjected to histopathology routinely in my institution for fear of infections and tumour without consideration for risk factors. The financial burden is on the patients and waste of histopathologist's man hour because other specimens are left un-attended. This study aims to find out the necessity of routine histopathology of tonsil specimens. **Materials and Methods**: A 2 year retrospective review of the histopathological results of two (paediatric and adult) groups of 61 patients managed for tonsillar diseases at the ENT UNIT of Jos University Teaching Hospital from July 2005 to June, 2007. Data extracted included biodata, clinical features and histopathological diagnosis. **Result**: The 61 patients comprise 35 children and 26 adults. The youngest and oldest paediatric patients were 1 year and 3 months and 16 years respectively, a range of 1 year 3 months to 16 years. The youngest and oldest adults were 17 and 50 years with a range of 17-50 years. Groups mean ages were 5.1 and 28.5 years. The gender ratios were 1:2.7 and 1:1.9 respectively. One adult was HIV positive. The histopathological diagnosis were chronic nonspecific tonsillitis in 10(16.6%), follicular tonsillitis in 23(38.3%), chronic suppurative tonsillitis in 10(16.6%), lymphoid hyperplasia in 18(30.0%) and lymphoma in 1(1.0%) respectively. **Conclusion**: Histopathologic request for tonsillectomy specimens should be based on certain risk factors with consideration of the cost to patients and to spare the histopathologist's man hour.

Key words: Histopathology, risk factor, routine, specimen, tonsil

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INTRODUCTION

Tonsillar diseases are common in paediatric and adult otolaryngological practice.[1] Wide varieties of diseases affect this tissue often requiring tonsillectomy.[2] These specimens are often subjected to histology routinely in my institution for fear of harbouring infections and more so tumour without consideration for risk factors in other to escape medicolegal actions.[3-5] This routine throws the financial burden on the patients and waste of the histopathologist's man hour to the detriment of other numerous specimens needing attention.[6,7] This study therefore aims to find out the necessity of routine histopathology of tonsil specimens.

MATERIALS AND METHODS

A 2 year retrospective review of the histopathological results of two (paediatric and adult) groups of 61 patients managed for tonsillar diseases at the ENT UNIT of the Jos University Teaching Hospital from July 2005 to June, 2007. Data extracted included biodata, clinical features and histopathological diagnosis.

RESULTS

Sixty-one patients comprise 35 children and 26 adults. Four patients had adenotonsillectomy. The youngest patient was 1 year and 3 months while the oldest was 16 years, a range of 1 year 3 months to 16 years. The adult youngest age was 17, while the oldest was 50 years. The age ranges from 17 to 50 years. The mean age for both groups was 5.1 years and 28.5 years. There were 10 paediatric males to 27 female with a ratio of 1:2.7, whereas there were 9 adult males and 17 adult females with a ratio of 1:1.9. Only one adult person had the risk factor of being HIV positive. The clinical features are shown in Table 1. The histological diagnosis were chronic nonspecific tonsillitis in 10(16.6%), follicular tonsillitis in 23(38.3%), chronic suppurative tonsillitis in 10(16.6%), lymphoid hyperplasia in 18(30.0%) and lymphoma in 1(1.0%) respectively.

Table 1: The clinical features of all the patients who had tonsillectomy

Clinical features	Total	Percentage
Recurrent sore throat	25	30.0
Mouth breathing	25	30.0
Oral fetor	2	2.0
Snoring/obstructive sleep apnoea	16	26.7
Dysphagia	4	6.7
Odynophgia	4	6.7
Tonsillar hypertrophy	35	56.7
Trismus	2	3.3
Neck swelling	5	8.3

DISCUSSION

Histopathological request for tonsil specimen differs in various centres across the globe. These are age, risk factors and cost, respectively.[8-10] In our centre, we routinely request or to rule out malignancy as is the case by Williams,[8] Beaty *et al*.,[9] respectively but in contrast, cost was not considered by us as done by Younis.[10]

Few centres have criteria but many routinely request.[3,11,12] In our study all the 61 patients comprising 35 children (10 males to 27 females) and 26 adults (9 males and 17 females) with a ratio of 1:2.7 and 1:1.9 respectively were all routinely subjected to histopathological examination. Tonsillar disease appears predominantly a female disease as shown by the higher incidence in the result of the two groups. This is dissimilar to the work of Ikram *et al*.,[3] where males predominate but similar to Ekirlie,[11] Garavello[12] and co-workers respectively where routine histology was requested.

The most common age groups were under 5 years constituting 24 patients (68.6%) in paediatric and second to third decade (20-40 years) in the adult groups. This result shows that tonsillectomy was frequently performed in the paediatric age group. This agrees with the findings of Hellier[13] and co-workers in United Kingdom and Wadoux[14] but in contrast to our study where we carried out routine tonsillectomy whilst theirs were day case tonsillectomies.

The indications for tonsillectomy in our study were recurrent tonsillitis, obstructive sleep apnoea and snoring, peritonsillar abscess and suspected tumour cases. Risk factors include tonsil asymmetry, visible tonsillar lesion, a neck mass, history of cancer, constitutional symptoms and social history. Five (8.3%) of our patients had neck swelling but only one had lymphoma. Benign enlarged tonsil might produce neck swelling and not necessarily a malignancy. The histological diagnosis is consistent with the clinical features as shown in Table 1. This is similar to the findings of Ikram,[2] Leif[15] and co-workers.

The histological diagnoses were chronic nonspecific tonsillitis in 10(16.6%), follicular tonsillitis in 23(38.3%), chronic suppurative tonsillitis (quinsy) in 10(16.6%), lymphoid hyperplasia in 18(30.0%) and lymphoma in 1(1.0%) respectively. This is similar to the findings of Ikram *et al*.,[2] except that the proportion varies.

The above result proved that the chances of harbouring malignancies were very small particularly in children and in patients without risk factors. The only case of lymphoma was found in adult male with retroviral disease.

Limitations

Some patients do not have the finances to foot the bill for histology, therefore accounting for less number of analyzed histology reports.

CONCLUSION

Request for tonsillectomy specimens should be based on certain risk factors with consideration of the cost to patients and to spare the histopathologist's man hour.

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