

Original Article

Attitude and Practices of General Dental Practitioners Towards Oral Biopsy

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ABSTRACT:

Introduction: Some oral lesions which give similar clinical appearance must be confirmed by adjunctive procedures such as biopsy. The general dental practitioner (GDP) should be knowledgeable about various techniques used for oral biopsy and should have ability to understand and formulate treatment plan based on biopsy report. **Objective:** The objective of the present study was to carry out a questionnaire based survey of qualified GDP in Jammu to assess their awareness and attitude regarding biopsy procedures for oral lesions and also various techniques, method of preservation for biopsy specimen. **Material and methods:** This cross sectional questionnaire based study was done on randomly selected 50 GDPs in Jammu region, consisting of 19 questions formulated to collect information on various aspects of oral biopsy. **Results:** The data thus collected was tabulated. The response rate was about 95%. Most of GDPs generally encounter various oral mucosal lesions in spite of which only 65% of them refer such patients for biopsy. There were conflict in results on preservation of biopsy tissue and type of biopsy used in different oral lesions. **Conclusion:** GDPs emphasized on need for special training programmes in undergraduate dental curriculum to enhance their practical skills for performing biopsy in daily dental practice for diagnosis.

Key words: General Dental Practitioners, Survey, Attitude, Oral Biopsy Diagnosis.

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INTRODUCTION

Biopsy procedure is a surgical procedure which involves obtaining of a living tissue specimen for performing diagnosis. The current gold standard for diagnosis is the histopathologic assessment of a tissue biopsy of the suspicious lesion.¹ with the help of this technique, establishment of the histological characteristic of suspect lesions, their differentiation, extent or spread can be done and subsequently, a treatment protocol can be adopted.² Biopsy is usually indicated for obtaining a final diagnosis on the basis of histopathological features. With the help of thus final diagnosis, treatment planning is done. Biopsy also plays a very important role in establishing prognosis of malignant and premalignant lesions and conditions.³ Patients often present with intraoral pathology in the general dental practice setting.⁴ Therefore, it is crucial that dental practitioners are aware of how to deal with pathology when it presents and have an understanding of investigative techniques that might assist in making a diagnosis. This is important irrespective of whether the dentist is the person actually undertaking the procedure or the investigation. If a referral is made to a specialist for biopsy, the referring

practitioner still needs to be familiar with the procedures and results obtained so that the patient can be appropriately managed.⁵ Despite the importance of the histological examination of tissue, general dental practitioners do not regularly submit specimens for examination. Suggested reasons for this include the clinician's perceptions of training deficits and the risk of diagnostic error.⁶ Also, the relative infrequency by which dentists encounter pathology compared to other oral / dental problems in general practice has been suggested to contribute to the lack of experience and confidence with respect to the management or further investigation of pathology.⁷ The present study aims to explore the attitudes of general dental practitioners in Jammu city towards oral biopsy for diagnosis of oral lesions.

MATERIAL AND METHODS

This cross sectional questionnaire based study included 50 randomly selected GDPs with academic qualification of Bachelor of Dental Surgery working in Jammu. The study excluded all professionals exclusively dedicated to some dental speciality (pediatric dentists, oral and maxillofacial surgeons, periodontists, endodontists,

specialists in oral medicine or oral pathology and orthodontists). Thus the questionnaire was targeted to general dentists practicing in Jammu region. The questionnaire consisted of 12 questions both open ended and closed ended questions. It was designed to collect information about professional aspects (years of professional activity) as well as attitude of GDP towards importance of oral biopsy, methods used for obtaining biopsy, preservation of biopsy tissue, diagnosis of mucosal lesions, referral to specialised centre and awareness about diagnostic pathology. The study also evaluated attitude of GDP towards examining oral mucosal lesions and use of various diagnostic modalities including biopsy for diagnosis.

RESULTS

Out of the 50 GDP who were approached with questionnaire, only 45 GDPs answered the questionnaire while 5 GDP choose not to take the survey citing various reasons. Demographically, dental practitioners who answered the questionnaire (n=45) included only 40 % of GDP with less than 5yr of experience in practice and only 60 % of GDPs were in practice over 10yrs. Of these 74.4% of GDP had 50 patients per month in their general clinical practice. At least 30.9% of practitioners surveyed report that they saw over 5cases/month of oral mucosal lesions such as leukoplakia, lichen planus etc in patients who had reported to them with some other chief complaints. On other hand, 60% of GDPs said that 5

patients/month report to them with chief complaint relating to mucosal lesions.

Nearly half of GDPs 49.08% surveyed declared that they do not want to examine patients with mucosal lesions as a matter of routine in their dental practice. Out of them 44.44% of the GDP did not even refer such patients at all to specialist such as oral pathologist or to even higher speciality centre . Out of 28 GDPs who did report that they examine and/or treat oral lesions, 82.14% use visual examination alone to arrive at a provisional diagnosis without any adjunctive aids used for arriving at the final diagnosis. When an oral mucosal abnormality is suspected only 60% of practitioners surveyed routinely advised such patients for biopsy whereas 5.45% dentists said that they do not advise biopsy for their patients .

When asked whether they perform biopsies themselves or refer to a specialist, only 7.0% dentists reported that they perform biopsies themselves whereas 83.0% GDP did not perform biopsy because of multiple reasons such as lack of awareness about the technique 46.87%, complications of biopsy 22.2%, patient unwilling 11.1% and fear of losing the patient 20%. When asked what type of biopsy would they recommend to patients, 73.50% GDPs recommended incisional or punch biopsy while 36.50% GDPs recommended an excisional biopsy. Also 27.27% GDPs did not even consider it necessary to obtain a written or verbal consent before carrying out a biopsy procedure.

Questions	Options	Answers
Average number of patients examined in a month	Less than 20 patients 20-50 More than 100	
Average number of patients examined with oral lesions in a month	1-5 6-10 11-15 Do not examine	
Method of examination of oral lesions	Visual alone Adjunctive aids Refer to specialist	
Refer patients with oral lesions	Hospital Oral pathologist Dermatologist Do not refer	
How often recommend biopsy	Always Sometimes Never	
Do biopsy Yourself	Yes No	
Types of biopsy recommend	Incisional Excisional Punch	
Why would you recommend/carry out a biopsy procedure	Information desired by the patient To improve your own academic knowledge To form a legal record Better understanding of the treatment options to use	
Do patients ask for reports	Always Never Sometimes	
Preservation of biopsied tissue fluid	Formalin Saline Alcohol Other	
Do you have a follow up of biopsy report	Yes Not	

DISCUSSION

Performing a biopsy procedure in oral cavity is well within the aptitude of training and ability of GDP. GDP who choose to perform biopsies in their clinics must be aware of various types of biopsy and their criteria for selection of patient. Several myths regarding biopsy may discourage GDPs from advocating the procedure in some patients and may reduce the possibility of patient acceptance.⁵

A review of the Indian literature has revealed anecdotal studies exploring knowledge, attitude and practice among GDPs towards oral biopsy as a diagnostic tool in daily clinical practice. Thus, the study reports the overall knowledge, attitudes, and the practice regarding biopsy procedures for oral lesions and also various techniques, method of preservation for biopsy specimen among the GDP of Ghaziabad region.

The survey provides a comprehensive report of the current status of the knowledge and practice among GDP in NCR. In the present study, survey was done by personally approaching the GDPs with the questionnaire rather than study methodology of emailed or mailed questionnaire as study methodology involving mailed questionnaire shows highly variable response rate such as Payne et al⁸. Payne reported response rate of 71%, whereas Cowan et al⁹ reported 67% response. In the present study, response rate obtained was 55% which is lower to reported by Murgod et al¹⁰ 90.54%. Most of the GDPs surveyed were in dental practice since last 5 yrs. Of the all the GDPs, 50.9% reported that they examine over 5 cases per month of oral mucosal lesions. Although all the GDPs are aware that oral biopsy is essential tool for arriving at definitive diagnosis of oral mucosal lesions. In contrast it was startling to know that 82.14% of them use only visual examination alone for diagnosis without the use of other adjunctive aids or oral biopsy.

Study found that GDPs (48.09%) generally do not examine mucosal lesions on routine basis ignoring the fact that early detection has better prognosis for patient. Furthermore, the incipient lesions are easily detected in the oral cavity because of accessibility of oral cavity for examination and detection. Both the patient and the professional are associated with causes underlying a delay in definitive diagnosis.¹¹

In many cases patients are unaware of presence of early asymptomatic lesion or resort to self medication. On the other hand, GDPs usually do not examine mucosal surfaces on routine basis or do not perform biopsy technique properly as also observed in the study.

In view of the findings of the study, improving the level of the knowledge and the usage of biopsy by GDPs is a very important public health and preventive method, along with patient counselling. However, further studies on a larger scale are necessary to assess and implement any measures

in regard to oral biopsy among GDPs. The study also highlights the need for further improvement in the training programme at undergraduate level as biopsy is considered gold standard for diagnosis of many oral lesions hence usually needed in daily practice. An increased awareness on the role of the oral pathologists as consultants in the clinical practice, needs to be emphasised.

CONCLUSION

Our study concluded the fact that even though most of the GDPs are aware of the importance of biopsy, very less number of them actually perform biopsies. The reason for this mainly due to inadequate emphasis placed on biopsy procedures in the undergraduate curriculum and thus a lack of experience in performing biopsies. So an increased emphasis on performing biopsy should be the part of the undergraduate curriculum.

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