

Attitude Of General Dental Practitioner Towards Biopsy Procedures In Maharashtra-A Survey

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Abstract

Background: General dental practitioners (GDPs) come across a lot of pathological lesions in the oral cavity. The present study was conducted to assess attitudes, amount of risk and awareness of general practitioners toward biopsy procedures.

Materials & Methods: 1000 general practitioners of both genders were administered a self-designed questionnaire detailing open- and close-ended questions regarding the sociodemographic and professional aspects of the dental practitioners and their knowledge about oral biopsy procedures filled in by the randomly selected dental practitioners was used.

Results: Out of 1000 subjects, males were 653 and females were 347. In response to question, do you think every lesion should be send for histopathological examination the reply was yes in 10% and no in 90%. If you do biopsy do you send for histopathological examination, the reply was yes in 92% and no in 8%. Have you been satisfied with the histopathological report in the past, the reply was yes in 89% and no in 11%. Do you feel there is a need to update your knowledge regarding lesions and biopsy procedure, the reply was yes in 94% and no in 6%. The difference was significant ($P < 0.05$).

Conclusion: General practitioners thought that biopsy should be regularly used as a tool in the diagnosis of questionable oral lesions.

Keywords: Biopsy, General Practitioners, Histopathological.

Introduction:

General dental practitioners (GDPs) come across a lot of pathological lesions in the oral cavity. Compared with most other sites, oral lesions are readily accessible to examination. Thus, oral cancer and other lesions are amenable to early detection.¹ This is particularly important as most of these lesions

have a much improved prognosis and survival rate, if diagnosed and treated early.² The diagnoses of many of these lesions require additional investigative procedures, of which biopsy plays a central role. Biopsy and subsequent tissue examination help in establishing the histological characteristics, level of differentiation, and the extent of spread of the suspected lesion. In some cases,

it may be the only method to get a confirmatory diagnosis.³

According to Schnetler and Leonard GDPs rarely see oral lesions requiring biopsy. This results in a lack of experience, unfamiliarity with the clinical patterns of oral malignancy, and may make them prone to referral.⁴ Many authors have repeatedly stressed the importance of postgraduate training through courses in oral medicine, diagnostic procedures and primary investigations. Although it is thought that GDPs prefer to refer the majority of oral lesions, there is no evidence on whether they may want to manage most oral lesions and whether they think postgraduate courses would help them to better deal with such lesions.⁵ The present study was conducted to assess attitudes of

general practitioners toward biopsy procedures.

Materials & Methods:

The present study comprised of 1000 general practitioners of both genders. The consent was obtained from all enrolled subjects.

Data such as name, age, gender etc. was recorded. A self-designed questionnaire detailing open- and close-ended questions regarding the sociodemographic and professional aspects of the dental practitioners and their knowledge about oral biopsy procedures filled in by the randomly selected dental practitioners was used. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

Results

Table I Distribution of patients

Total- 1000		
Gender	Males	Females
Number	653	347

Table I shows that out of 1000 subjects, males were 653 and females were 347.

Table II Questionnaire used in study

Average number of patients examined with oral lesions in the month?	A: 1-2	B: 6-10	C: 11-13	D: Do not examine
Percentile response	32	43	25	0
Method of examination of oral lesion?	A: Visual alone	B: Adjunctive aids	C: Visual+ Radiographic	D: Refers to specialist

Percentile response	18	0	69	13
Where you refer patients with oral lesions to?	A: Hospital	B: Oral Pathologist	C: Dermatologist	D: Do not refer
Percentile response	19	81	0	0
Which lesions have you come across in your routine dental practice?	A: Benign	B: Pre Malignant	C: Malignant	D: All
Percentile response	13	24	6	57
Which lesions required biopsy according to you?	A: Reactive and inflammatory	B: Benign	C: Premalignant and malignant	D: All
Percentile response	0	0	36	64
How often you recommend biopsy to diagnose oral lesions?	A: Always	B: Sometimes	C: Never	D: Always refer to oral surgeon
Percentile response	37	36	13	14
How you preserve the specimens before sending for histopathological analysis?	A: Saline	B: Alcohol	C: Formalin	D: Any other chemical
Percentile response	18	0	82	0

Do you wash the specimens prior placement in the fixative?	A: Yes	B: No		
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Percentile response	43	57		
How would you decide biopsy procedure?	A: Size and shape of the lesion	B: Nature of the lesion	C: Physician requirement	D: All of the above
Percentile response	0	7	0	93
Which type of biopsy you usually recommend?	A: Initial biopsy	B: Excisional and insisional biopsy	C: Fine needle aspiration	D: Excisional and incisional Biopsy
Percentile response	18	50	0	32
Why would you recommend to carry out a biopsy procedure?	A: Information desired by the patient	B: To improve your own academic knowledge	C: To form a legal record	D: Better understanding of the treatment options to use
Percentile response	0	0	0	100

Discussion: Biopsy and subsequent tissue examination help in establishing the histological characteristics, level of differentiation, and the extent of spread of the suspected lesion. In some cases, it may be the only method to get a confirmatory diagnosis.⁶ Apart from diagnosis, biopsies also help in predicting the biological behavior of the lesions and help in adopting appropriate treatment strategies.⁷ Although primary indications for oral biopsies are for suspected

malignancies and premalignant lesions, they are also applied for benign lesions, vesiculobullous lesions, periapical lesions, and cysts. In addition, they have undeniable medico-legal value.⁸ However, in spite of the wide range of information available from routine oral biopsy and histopathological examination, biopsy procedures remain unpopular among GDPs.⁹ The present study was conducted to assess attitudes of general practitioners toward biopsy procedures.

We found that out of 1000 subjects, males were 563 and females were 347. Sunil et al¹⁰ explored the attitude of GDPs and explored the reasons for reluctance of GDPs to perform biopsies, to emphasized the importance of oral pathologists. Most dentists agreed that biopsy was important in diagnosis and management of oral lesions, though most of them did not perform biopsies due to various reasons. The knowledge of the practitioners regarding the various oral lesions, biopsy techniques, handling of specimen, and laboratory techniques were found to be inadequate. It is hoped that the study will help in emphasizing the need for specific training or continuing dental education (CDE) programs to enhance the practical skills of dental practitioners so that biopsy is regularly used as a tool in the diagnosis of questionable oral lesions.

We found that in response to question, do you think every lesion should be send for histopathological examination the reply was yes in 10% and no in 90%. If you do biopsy do you send for histopathological examination, the reply was yes in 92% and no in 8%. Do you take advice from an oral pathologist or oral surgeon before taking a biopsy, the reply was yes in 10% and no in 90%. Do you wash the specimen prior to placement in the preservative, the reply was yes in 93% and no in 7%. Diamanti et al¹¹ investigated biopsy procedures in general dental practice and assessed the views and attitudes of specialists on the dental specialist surgical registers; dentists in general practice (GDPs) and patients undergoing biopsy procedures. Questionnaires were sent to 98 oral and maxillofacial surgeons and surgical dentists, 335 general dental practitioners and 220 patients attending the Oral Medicine Clinic at the Dental Hospital, Manchester. Participation rates were 68 (74%), 227 (72%), and 158 (76%) respectively. Specialists: 47 (70%) would discourage dental practitioners undertaking biopsies. Concerns were a lack of skills and delays in referral; 20 (30%) considered GDPs should be able to perform simple biopsies for benign lesions. Dentists: 33 (15%) reported they had performed oral biopsies in the last two years; 136 (60%) felt they should be competent to biopsy benign lesions. Their main concerns were lack of practical skills and the risk of diagnostic error. Patients: 112 (65%) worried about their biopsy result, 67 (39%) would feel anxious if their

dentist did the biopsy, although 40 (23%) were anxious when biopsied in the oral medicine clinic.

We observed that in response to question do you expect tissue alteration if specimen is preserved for long time, the reply was yes in 92% and no in 8%. Do you send clinical history along with specimen, the reply was yes in 94% and no in 6%. Are you able to interpret the language of histopathological report, the reply was yes in 90% and no in 10%. Have you been satisfied with the histopathological report in the past, the reply was yes in 89% and no in 11%. Do you feel there is a need to update your knowledge regarding lesions and biopsy procedure, the reply was yes in 94% and no in 6%. Franklin and Jones¹² have reported a marked increase of biopsy specimens to Oral Pathology Department in the School of Clinical Dentistry, Sheffield due to an increased encouragement they gave to recent dental graduates to send in their material. Moreover, according to some previous studies, most GDPs preferred a collection service for specimens by an oral pathology courier laboratory, similar to the service provided by laboratories for general medical practitioners, with links to oral medicine and oral surgery professionals for advice. Some GDPs also reportedly considered a pictorial color handbook or charts showing oral lesions that need to be biopsied as helpful.

Conclusion: Authors found that general practitioners thought that biopsy should be regularly used as a tool in the diagnosis of questionable oral lesions.

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