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Oral pathology – A known or unknown branch…Time to Ponder

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ABSTRACT

Introduction: As we move into the era of scientific advancements our branch i.e oral pathology still remains a less known branch amongst the general medical practitioners. There is still a paucity of information regarding our branch, the techniques we carry out and field of medicine where we can offer our services.

Material & Methods: The present study was conducted from October 2022 to January 2023. A printed questionnaire was prepared and circulated to the general medical practitioners of Kanpur district. The questionnaire comprised of the demographic data of the participants including age, gender, years of experience, designation, specialty and the basic facts about oral pathology as a branch.

Results: the results of the present study revealed that out of 51 medical practitioners surveyed 68.62% were unaware of our branch. Though approximately 78.43% of the medical professionals were aware about oral squamous cell carcinoma grading pattern but 97% of them refer oral pathology cases to general pathologist. Surpringly 65% of them were unaware of the advanced diagnostic techniques employed by us. Around 82.35% of them agreed that oral pathologists deserve a job in cancer institute.

Discussion: The results showed that though our is a very old branch but still remains unknown to many medical professionals. Most of the doctors surveyed were unaware of the advancement in our field.

Conclusion: This study highlights the need to promote the merits of our branch in the minds of medical fraternity which is long due.

Key words: Oral Pathology, General Pathology,Awareness, India, Medical professional.

Introduction

Oral pathology is the branch of dental science dealing with pathology affecting the oral and maxillofacial regions.[1]As we move into the era of scientific advancements our branch i.e oral pathology still remains a less known branch amongst the general medical practitioners. The information about the current scenario of oral pathology specialty and its future perspective is

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evident in the literature.[2-4] Oral pathology forms a crucial link between basic dental sciences and clinical dental sciences.[5,6]More recently, dental traits of congenital syphilis, bilaterally impacted maxillary and mandibular impacted canines, Stensen's duct sialolith, and eruption cyst associated with right maxillary deciduous first molar were reported from our dental department referred by medical professionals in our institution.[7-10] There is still a paucity of information regarding our branch, the techniques we carry out and field of medicine where we can offer our services. To know the extent of awareness about oral pathology specialty among medical professionals in Kanpur district, Uttar Pradesh.

Materials and methods

The present study was conducted from June 2022 to September 2022.A printed questionnaire was prepared and circulated to the general medical practitioners of Kanpur district. The questionnaire comprised of the demographic data of the participants including age, gender, years of experience, designation, specialty and the basic facts about oral pathology as a branch.

Results

The results revealed that out of 51 medical practitioners surveyed 76.5% were unaware of our branch.Though approximately 78.4% of the medical professionals were aware about oral squamous cell carcinoma grading pattern but 97.5% of them refer oral pathology cases to general pathologist.Surprisingly 65% of them were unaware of the advanced diagnostic techniques employed by us.Around 82.4% of them agreed that oral pathologists deserve a job in cancer institute.

Demographic Data of Participants

Age Group(Years)	No.	Percentage
21-30	02	03.9%
31-40	14	27.5%
41-50	25	49.1%
51-60	10	19.5%

Sex

Male	38	74.5%
Female	13	25.5%

Designation

Designation	No.	Percentage
Medical Officer	13	25.5%
Civil Surgeon	02	03.9%
Consultant	31	60.8%
Senior Consultant	05	09.8%

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Year of Practice

Years	No.	Percentage
01-05 Years	05	09.8%
06-10 Years	15	29.4%
11-15 Years	18	35.3%
16-20 Years	05	09.8%
21-30 Years	08	15.7%

Speciality

Speciality	No.	Percentage
Medical Undergraduate	07	13.7%
Gynaecology	05	09.8%
Paediatrics	07	13.7%
General Surgery	02	03.9%
General Medicine	08	15.7%
Orthopaedics	02	03.9%
Dermatology	02	03.9%
Ophthalmology	02	03.9%
Pulmonology	01	01.9%
Gastroentrology	02	03.9%
Radiotherapy	01	01.9%
Cardiology	04	07.8%
ENT Surgeon	03	05.9%
Neurology	01	01.9%
Community medicine	03	05.9%
Physiology	01	01.9%

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Participants response to Basic questions about Oral Pathology

QUESTION	Yes		No	
	No.	Percentage	No.	Percentage
Know any Oral Pathologist	16	31.4%	35	68.6%
Heard about Oral Pathology	12	23.5%	39	76.5%
Seen any oral Histopathological/Cytopathological report	40	78.4%	11	21.6%
If YES, Histopathological/ Cytopathological report Prepared by				
General Pathologist	39	97.5%	-	-
Oral Pathologist	01	02.5%	-	-

Knowledge about Histopathological garding of common oral cancer	40	78.4%	11	21.6%
Significance of diagnosis of different oral lesions	37	72.5%	14	27.5%
Knowledge about terminology of potentially malignant oral disorder	37	72.5%	14	27.5%
Significance of cytology in diagnosis of oral lesions	37	72.5%	14	27.5%
Significance of Immunohistochemistry in diagnosis of oral lesions	27	52.9%	24	47.1%
Significance of Immunofluorescence in diagnosis of oral lesions	21	41.2%	30	58.8%
Significance of special stains in diagnosis of oral lesions	18	35.3%	33	64.7%
Knowledge about variants of oral squamous cell carcinoma	32	62.7%	19	37.3%
Oral Pathologist deserve a job in Cancer Institute	42	82.4%	09	17.6%

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Discussion

This study was conducted among medical professionals working in Government and Private sector in Kanpur district, Utter Pradesh, India, to assess and create awareness about oral pathology speciality.

Sex wise, mainly responses received from males (74.5%), as in Shamim T et al. study.

Age wise, major responses received from 41–50 age group (49.0%) while in Shamim T et al. responses received from 31-40 age group (55.5%).

Designation wise, maximum responses were received from consultant (60.8%) while in Shamim T et al. study Junior Consultant (58.3%).

Specialty wise, majority of responses were received from General Medicine specialist (15.7%) while in Shamim T et al. study medical undergraduate (19.4%).

Among all the medical professionals surveyed 76.5% were not aware of the oral pathology specialty and 97.5% of medical professionals refer oral pathology cases to general pathologists for histopathology report, while in Shamim T et al. study most of the medical professionals 91.7% were aware, that is just reverse and referral to general pathologist was 77.8%.

In our study 72.5% of medical doctors know about the new terminology potentially malignant oral disorders and their histopathological interpretation.However, 41.7% of medical doctors know about the new terminology potentially malignant oral disorders and their histopathological interpretation as detailed in literature.[11,12]

78.4% doctors of our survey were aware about the common oral cancer grading,while 33.33% of medical doctors were aware about common oral cancer (squamous cell carcinoma) grading as given in literature.[13,14]

The awareness for various histopathological diagnostic measures in oral lesions among surveyed medical practitioner, maximum responses to cytology (72.5%) and immunohistochemistry (52.9%). According to previous literatures Cytology is usually employed in oral potentially malignant lesions, oral cancer, and lymphoproliferative lesions of oral cavity.[15-18]Immunohistochemistry is routinely used for oral cancers, odontogenic tumors, and spindle cell neoplasms.[19-21]

The awareness about immunofluorescence is 41.2% and special stains is 35.3% while in Shamim T et al. that is 72.2% and 52.8% respectively in the diagnosis of oral lesion.[22]The role of immunofluorescence and special stains in the diagnosis of oral lesions is highly appreciated in the literature.[23,24]

In this study 82.4 % of surveyed medical practitioner were agreed that oral pathologist deserve a job in cancer institute.More recently, National Accreditation Board for Testing and Calibration Laboratories(NABL) has come up with amendment for oral pathologists to practice histopathology and cytopathology of oral and maxillofacial region and hematology in India.[25]

Conclusion:

This study highlights the need to promote the merits of our branch in the minds of medical fraternity which is long due.The results showed that though this is a very old branch but still remains unknown to many medical professionals and they are unaware about the advancement in our field in northern India, while oral cancer is most common in India.

Soits time to make them aware of oral pathology as a specialized branch.

Aknowlegment

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Conflicts of interest

There are no conflicts of interest.

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