Awareness of Oral and Maxillofacial Surgery among Medical Practitioners in North India: A Survey

Rohit Sharma, Gerish Atri, Madhur Verma

ABSTRACT

Oral and maxillofacial surgery (OMFS) is a specialty of dentistry dealing with the surgical aspects of head and neck. It is considered to be a bridge between medical and dental specialties. However, little is known regarding this field among the medical practitioners. A survey was conducted among 462 practitioners, specialists and super-specialists in North India to check for awareness regarding the field of OMFS, and its scope in the medical field.

Keywords: Oral and maxillofacial surgery, Medical practitioners, Awareness.


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INTRODUCTION

Oral and maxillofacial surgery (OMFS) is a specialty, which can be considered to be the borderline between dentistry and medicine. This specialty has had a very strong development in the past in areas, such as facial trauma, dentofacial deformities, jaw pathologies, temporomandibular joint disorders, trigeminal neuralgias, salivary gland pathologies, orofacial pains, oral cancer and swellings of the face and neck. Many completely new methods have been developed, such as distraction osteogenesis, dental implant surgeries, tissue engineering, reconstruction, treatment of cleft lip and palate, etc. However, it is not clear how this specialty is being perceived among medical professionals.

Ameerally et al conducted a study in England and concluded that up to 79% of the general population had not heard of OMFS, and around 74% did not understand its role and scope. Ifeacho et al (2004) concluded that although most of the medical professionals had heard of this particular specialty, they were not clear about the clinical expertise this branch could offer. In a study by Hunter et al (1996), it was found that in those medical professionals who did know about this branch, the referral pattern for treatment of conditions that overlapped different specialties mostly did not favor the choice of an oral and maxillofacial surgeon.

However, no study could be found regarding the awareness of oral and maxillofacial surgery among the medical fraternity in North India. The present study was conducted among 462 medical practitioners in the states of Punjab, Haryana, Himachal Pradesh and Delhi to check for their awareness regarding oral and maxillofacial surgery, and its scope within the medical field.

MATERIALS AND METHODS

A double-blind, randomized study was conducted to check for the awareness of oral and maxillofacial surgery among the medical fraternity. Four hundred and sixty-two medical practitioners, comprising of general practitioners, specialists and super-specialists, were selected for the study. They were each given a questionnaire, comprising of certain questions, to fill. Those medical practitioners who had any of their family members in the dental fraternity were excluded to remove any sort of bias. The questionnaires were then reviewed and analyzed, and were evaluated.

RESULTS

A total of 462 medical practitioners were reviewed, comprising of 295 general practitioners, 155 specialists and 12 super-specialists. Out of the 155 specialists, 92 were physicians, 25 were general surgeons, 19 were orthopedic surgeons, and 19 were pediatricians. The super-specialists comprised of gastroenterologists (3), endocrinologists (3), nephrologists (3), cardiologists (2) and a rheumatologist (Fig. 1).

The clinical experience of the medical practitioners ranged from 2 to 15 years (average 6.13 years). Four
hundred and thirty-nine (95.02%) of the medical practitioners had previously heard about oral and maxillofacial surgery, whereas 23 (4.98%) had never heard of the specialty (Fig. 2). Only 96 (20.78%) medical practitioners had ever visited, consulted or referred a patient to an oral and maxillofacial surgeon (Fig. 3). They knew, on an average, 1.47 oral and maxillofacial surgeons in their vicinity. Ninety-eight medical practitioners did not know even a single oral and maxillofacial surgeon in their vicinity.

The encounter of medical practitioners with facial trauma varied from once a week to once in 6 months. The 12 super-specialists had never encountered any case of facial trauma in their clinical practice. One hundred and forty-seven (31.82%) of all medical practitioners referred facial trauma patients to general surgeon, followed by dental surgeon (98, 21.21%), plastic surgeon (93, 20.13%), oral and maxillofacial surgeon (65, 14.07%), orthopedic surgeon (47, 10.17%) and ENT specialist (12, 2.6%). Oral and maxillofacial surgeons were one of the choices for managing trauma patients for 52.38% (242 out of 462) medical practitioners, with 65 of them having oral and maxillofacial surgeons as their first preference, 76 as the second preference, 47 as the third preference, 16 as fourth, 12 as fifth and 26 as the sixth preference.

Medical practitioners were also asked about the management of various conditions, which are managed by oral and maxillofacial surgeons (Figs 4A to C). According to 433 (93.72%), wisdom tooth removal is done by dental surgeons. Only 29 (6.28%) knew that it is a specialist job, performed by an oral and maxillofacial surgeon.

According to medical practitioners, cleft lip and palate is managed by plastic surgeons (207, 44.81%), ENT surgeons (178, 38.53%), oral and maxillofacial surgeons (54, 11.69%) and general surgeons (23, 4.98%). Maxillary sinus pathologies, according to them, are managed by ENT surgeons (259, 56.06%), oral and maxillofacial surgeons (172, 37.23%) and general surgeons (31, 6.71%).

Facial space infections would be managed by general surgeons (129, 27.92%), oral and maxillofacial surgeons (121, 26.19%), dental surgeons (115, 24.89%), ENT surgeons (72, 15.58%) and plastic surgeons (25, 5.41%). Cosmetic jaw surgeries would be performed by plastic surgeons (372, 80.52%), oral and maxillofacial surgeons (86, 18.61%) and dental surgeons (0.87%). According to them, trigeminal neuralgia would be best managed by a neurosurgeon (246, 53.25%), general surgeon (105, 22.73%), oral and maxillofacial surgeon (102, 22.08%) and ENT surgeon (9, 1.95%).

Temporomandibular joint disorders would be taken care by an oral and maxillofacial surgeon according to 186 (40.26%), by a dental surgeon according to 107 (23.16%), orthopedic surgeon according to 75 (16.23%), ENT surgeon, general surgeon and plastic surgeon according to 62 (13.42%), 17 (3.68%) and 16 (3.46%) medical practitioners respectively. Jaw pathologies, according to them, are managed by a dental surgeon (187, 40.48%), an oral and maxillofacial surgeon (142, 30.74%), general surgeon...
Figs 4A to C: Management of various conditions according to medical practitioners

A: Facial trauma, Cleft lip and palate, Maxillary sinus pathologies, Facial space infections, Cosmetic jaw surgeries
B: TMJ disorders, Jaw pathologies, Salivary gland pathologies, Oral cancer, Face or neck swellings

C: Wisdom tooth removal, Trigeminal neuralgia, Dental implants, Extraoral draining sinuses, Orofacial pain

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(81, 17.53%), orthopedic surgeon (45, 9.74%) and an ENT surgeon (7, 1.52%). Two-hundred and seventeen (46.97%) medical practitioners are of the view that salivary gland pathologies would be treated by a general surgeon, whereas 166 (35.93%) think it is the area of interest of an ENT surgeon. Oral and maxillofacial surgeons and dental surgeons are preferred by 64 (13.85%) and 15 (3.25%) medical practitioners respectively.

Dental implant surgery, according to them, is performed by dental surgeons (448, 96.97%) and oral and maxillofacial surgeons (14, 3.03%). Oral cancer would be managed best by a general surgeon (214, 46.32%), oral and maxillofacial surgeon (135, 29.22%), ENT surgeon (72, 15.58%), plastic surgeon (34, 7.36%) and a dental surgeon (7, 1.52%).

According to medical practitioners, swellings of the face and neck are handled by a general surgeon (319, 69.05%), plastic surgeon (46, 9.96%), ENT surgeon (42, 9.09%), oral and maxillofacial surgeon (36, 7.79%) and dental surgeon (19, 4.11%). Extraoral draining sinus is managed by general surgeon (257, 55.63%), ENT surgeon (76, 16.45%), oral and maxillofacial surgeon (73, 15.80%) and dental surgeon (56, 12.12%). Orofacial pains, according to them, are treated by an oral and maxillofacial surgeon (148, 32.03%), neurosurgeon (143, 30.95%), dental surgeon (105, 22.73%), ENT surgeon (41, 8.87%) and general surgeon (25, 5.41%).

DISCUSSION

The study showed that although a majority of medical practitioners had heard of OMFS, most of them were not aware of the wide surgical scope of this specialty. This is in accordance with the studies conducted by Laskin(1996), Lesny (2000), Spina et al (2000) and Langdon (2006). According to Ameerally et al, medical practitioners need to have a better understanding of what our specialty has to offer if patients are to receive the optimal treatment for orofacial problems.
According to Hunter et al., the lack of awareness of OMFS is due to a lack of publicity in the media, along with the fact that OMFS is grounded in dentistry rather than in medicine. Ifeacho et al. insisted that there was a clear division in the awareness between conditions relating to the mouth and those outside the mouth, in the head and neck region, despite those being well within the scope of OMFS.

The conditions asked to medical practitioners could be treated by different specialties. In fact oral and maxillofacial surgeons could treat all of the listed conditions. Although there are overlapping responsibilities over some specialties, there are never absolute right or wrong on who should do what. It all depends on the training they have received and the culture in different places. The results indicate only on how the medical practitioners thought when they came across these diseases. In real life, it depends a lot on who was referring the cases. A dental surgeon would mostly refer these cases to an oral and maxillofacial surgeon, while a medical practitioner would tend to do it differently. Although OMFS is involved in the treatment of a lot of important conditions or diseases, it is disappointing to see the lack of awareness among the medical practitioners.

Wisdom tooth removal is absolutely a scope of oral and maxillofacial surgeons. Interestingly, 93.72% of medical practitioners thought that dental surgeons would do that. Cleft lip and palate repair surgeries involves mostly plastic surgeons, ENT surgeons as well as oral and maxillofacial surgeons. The results showed that 44.81 and 38.53% thought the plastic surgeons and ENT surgeons, respectively, should be responsible for this, while only 11.69% thought of oral and maxillofacial surgeons. Although not as obvious as wisdom tooth removal, cosmetic jaw surgery is again one of the most unique surgeries that oral and maxillofacial surgeons do. Results showed that 80.52% of medical practitioners would seek plastic surgeons for this kind of treatment, while only around 18.61% would seek the services of an oral and maxillofacial surgeon. Although some plastic surgeons would do this kind of surgery, still this is a main area in OMFS. This again reflects the poor awareness of OMFS among medical practitioners.

These results indicated a lot of medical practitioners were actually unaware of how oral and maxillofacial surgeons could help them if their patients got a relevant disease. Even it was within the scope of OMFS, they would prefer other specialties more.

CONCLUSION

There is a very low awareness of OMFS in the medical practitioners in terms of its scope of service. There is no doubt that the specialty deserves a better public awareness. The stress should be put on the public image of what this specialty is, and awareness of the treatment this specialty could provide. Awareness of the scope of OMFS should lead to improved access and efficient delivery of a quality service. Our medical colleagues need to have the necessary knowledge to make informed decisions about their patient’s management. Equally, the public would benefit from knowing what OMFS offers them, so that they can request an appropriate referral.

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