

Evaluation of consultation contents directed from a university training and research hospital to an oral and maxillofacial surgery clinic

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Received: 29 August 2022

Accepted: 25 December 2022

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How to cite this article:

Çolak S, Demirsoy MS, Erdil A, Keldal G, Altan A, Akbulut N. Evaluation of consultation contents directed from a university training and research hospital to an oral and maxillofacial surgery clinic. Int Dent Res 2023;13(1):35-43.
<https://doi.org/10.5577/idr.2023.vol13.no1.6>

Abstract

Aim: This study aimed to evaluate the conditions and indications in which a research and training hospital directs outpatient and inpatient consultations to an oral and maxillofacial surgery clinic and to evaluate the expectations of physicians in the treatment and management of various conditions.

Methodology: The outpatient and inpatient consultations directed from Tokat Gaziosmanpaşa University's clinics and internal and surgical medical sciences services to the same institution's Oral and Maxillofacial Surgery Clinic between January 2013 and January 2022 were included. The patient characteristics, the aims of and responses to the consultations, and the applied interventions were recorded and classified. The quantitative data were analyzed with a t-test, and the classified data were analyzed with cross-tables and chi-square tests. P values below 0.05 were considered significant.

Results: The medical records and consultation notes of 178 patients (92 males, 86 females) were evaluated. Of the consultations referred, 97 were requested from Forensic Medicine, 23 from Oncology, 11 from Neonatology, 8 from Otorhinolaryngology, 6 from Orthopedics, 6 from Neurology and Neurosurgery, 5 from Pediatrics, 4 from Emergency Medicine, and 18 from other departments. When the contents of the consultation were examined, it was observed that most of them were requested for age determination, post-assault examination, and dental abscesses.

Conclusion: The present study indicates that an oral and maxillofacial surgery clinic is in close interaction with many medical branches and disciplines, especially forensic medicine, oncology, otorhinolaryngology, and neonatology.

Keywords: Consultation, dentistry, forensic odontology, oncology, oral and maxillofacial surgery

Introduction

Cooperation between the oral and maxillofacial surgery (OMFS) clinics and departments of medical sciences is essential to provide preventive and therapeutic patient care and long-term prognosis. However, medical and dentistry education have been institutionally separated in Turkey, as in many countries (1-3).

Coordination and cooperation between physicians and dentists are essential in providing high-quality health care services to patients. Dental and maxillofacial traumas admitting to the ER (4), the need for a multidisciplinary approach in cases of oral cancers (5), the relationship between forensic medicine and forensic dentistry (6), palliative care services (7), the increasing incidence of osteonecrosis due to radiotherapy or medications (8-10), congenital anomalies such as cleft lip and palate (11), and autoimmune pathologies of the oral cavity and their relationship to patients' systemic conditions (12) reveal the need for further cooperation between OMFS and related medical specialties.

Given the scarce evidence of interprofessional collaboration between dentists, oral and maxillofacial surgeons, and physicians, exploratory studies are required to determine the current state of collaboration and coordination among these disciplines.

This study aims to determine in which cases and indications the clinics and inpatient services of a faculty of medicine need to consult dentists or OMFS professionals and to reveal the expectations in treatment and patient management processes.

Materials and Methods

All procedures followed were per the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1964 and later versions. Informed consent was obtained from all participants included in the study or their relatives. This retrospective study was approved by the Clinical Research Ethical Committee of the Faculty of Medicine of Tokat Gaziosmanpaşa University, with registration number 21-KAEK-274. (ClinicalTrials.gov Identifier: NCT05454384, registration date: 11.07.2022)

The Study Sample Determination

The consultation forms of patients referred from the clinics and inpatient services of the Faculty of Medicine at Tokat Gaziosmanpaşa University between January 2013 and January 2022 were included in the current study via the Enlil-Hospital Information Management System (Eskişehir, Turkey).

The following were excluded from the study: the consultation forms referred within the same institution or from external institutions with written consultation

notes and patients with missing demographic data or consultation reports.

Patient variables such as age, gender, the department in which consultations were requested, and for what purpose the patients were consulted were recorded and classified. During the patient management and treatment process, the responses given to the consultations by the OMFS clinic, the physicians' recommendations, the patient management, and the treatments applied were classified and recorded for statistical analyses.

Statistical analysis

Analyses were performed by using SPSS software (IBM SPSS Statistics version 21, IBM Inc., Armonk, NY, USA). The normal distribution of the obtained data was evaluated using the Kolmogorov-Smirnov test. Validations were also performed using skewness and kurtosis values (from -1.5 to +1.5). The homogeneities of variances were also checked.

The t-test was used to evaluate the quantitative data. The classified qualitative data were evaluated using crosstabs and chi-square (χ^2) tests. *P*-values below 0.05 were considered significant.

Results

The medical records and consultation notes of 178 patients (92 males, 86 females) referred from clinics and inpatient services of the Tokat Gaziosmanpaşa University Training and Research Hospital to the Tokat Gaziosmanpaşa University Department of Oral and Maxillofacial Surgery clinic between 2013 and 2022 were evaluated. A total of 21 clinics and services directed consultations.

The directing clinics were grouped due to the number of requests. The clinics that requested more than 3 consultations formed 8 groups, and 13 clinics and services that requested 3 or fewer within the specified period formed a single group.

Of the 178 consultations, 97 (54.4%) were requested from forensic medicine, 23 (12.9%) from oncology, 11 (6.2%) from neonatology, 8 (4.5%) from otorhinolaryngology, 6 (3.4%) from neurology and neurosurgery, 5 (2.8%) from pediatrics, 4 (2.2%) from emergency medicine, and 18 (10.1%) from other departments (plastic and reconstructive surgery, cardiovascular surgery, internal medicine, ophthalmology, urology, gastroenterology, palliative care, pulmonology, sleep medicine, and infectious disease).

Reasons for Requesting Consultations

Of the 178 consultations, 50 (28.1%) were requested for age determination, 30 (16.9%) for post-assault examination, 25 (14%) for dental abscess, 16 (9%) for

traffic accidents, 12 (6.7%) for induction or during bisphosphonate therapy, 9 (5.1%) for mandible fracture or dental trauma after falling, 8 (4.5%) for temporomandibular disorders (TMD) or dislocation, 7 (3.9%) for pathologies of the oral cavity, 7 (3.9%) for cleft lip and palate, 6 (3.4%) for natal teeth, 3 (1.7%) for complications after teeth extractions, and 5 (2.8%) for other reasons (e.g., tooth extraction prior to endoscopy, idiopathic fever, dental trauma due to intubation).

Patient gender and age

The relationship between the gender and age of the consulted patients was examined by a t-test. The mean age of the female patients ($n = 86$) was 28.45 ± 20.86 years, whereas that of the male patients ($n = 92$) was 37.09 ± 22.37 years. The age distributions of the male and female patients were statistically significant ($p = 0.009$, $p < 0.05$) (Table 1).

Patient gender and the consulting department

The chi-square test revealed a significant correlation between the gender of the patient and the department for which consultation was requested ($p = 0.006$, $p < 0.05$). Of 97 consultations requested by forensic medicine, 56 were females, and 41 were males. Of 23 consultations requested by oncology, 17 were males, and six were females (Table 2).

Correlation between patient gender and referral reason

There was a significant correlation between patient gender and the reason for the consultation ($p = 0.000$, $p < 0.05$). The majority of the patients ($n = 50$) referred for age determination were females ($n = 44$). In contrast, of 30 patients referred for post-assault examination, 25 were males. Males also accounted for a higher number of cases referred for dental abscesses, traffic accidents, examinations before or after bisphosphonate medication, and cleft lip and palate (Table 3).

Table 1. Age distributions

	Gender	Participants	Age	Std. Deviation	Median	Min	Max	Skewness	Kurtosis	P-value
Age	Female	86	28.45	20.863	17.65	0	86	0.976	-0.206	0.009
	Male	92	37.09	22.376	38.50	0	86	0.103	-0.890	

Table 2. Department requesting consultation - Gender distribution

Departments	Gender				Total		p-value
	Female		Male				
Forensic Medicine	56	31.5%	41	23.0%	97	54.5%	0.006
Oncology	6	3.4%	17	9.6%	23	12.9%	
Neonatology	4	2.2%	7	3.9%	11	6.2%	
Otorhinolaryngology	4	2.2%	4	2.2%	8	4.5%	
Orthopedics	4	2.2%	2	1.1%	6	3.4%	
Neurology and Neurosurgery	0	0.0%	6	3.4%	6	3.4%	
Pediatrics and Intensive Care Units	1	0.6%	4	2.2%	5	2.8%	
Emergency Medicine	4	2.2%	0	0.0%	4	2.2%	
Other Departments	7	3.9%	11	6.2%	18	10.1%	
Total	86	48.3%	92	51.7%	178	100.0%	

Table 3. Reason for requesting consultation-gender distribution

Reasons for Requesting Consultation	Gender						p-value
	Female		Male		Total		
Age Determination	44	24.7%	6	3.4%	50	28.1%	0.000
Post-Assault Examination	5	2.8%	25	14.0%	30	16.9%	
Dental Abscess	9	5.1%	16	9.0%	25	14.0%	
Traffic Accident	4	2.2%	12	6.7%	16	9.0%	
Bisphosphonate Therapy	2	1.1%	10	5.6%	12	6.7%	
Mandible Fracture or Dental Trauma After Falling	5	2.8%	4	2.2%	9	5.1%	
Temporomandibular Disorders or Dislocation	3	1.7%	5	2.8%	8	4.5%	
Cleft Lip and Palate	1	0.6%	6	3.4%	7	3.9%	
Pathologies of Oral Cavity	3	1.7%	4	2.2%	7	3.9%	
Natal Teeth	4	2.2%	2	1.1%	6	3.4%	
Complications after Teeth Extractions	3	1.7%	0	0.0%	3	1.7%	
Other Reasons	3	1.7%	2	1.1%	5	2.8%	
Total	86	48.3%	92	51.7%	178	100.0%	

Treatments and procedures

The treatments and procedures performed in the OMFS clinic in this study were as follows: age determinations (n = 50), teeth extractions (n = 33), referrals to another department of dentistry (n = 18) (orthodontics, periodontology, endodontics, restorative, or prosthodontics), clinical follow-up (n = 18), medical treatments or simple interventional treatments (n = 13), operations under general anesthesia (n = 12), conservative TMD treatments (n = 7), and planned post-discharge interventions (n = 7). As no pathology was observed, no treatments were administered in 12 patients and six patients due to late admission after consultation (an extended period after an assault or a traffic accident). Two patients refused the treatment of choice (Table 4).

Notable consultation requests

Determination of legal age

The department of forensic medicine referred the highest number of patients for consultation (n=97). Of these referrals 56 (57.7%) were females, and 41 (42.3%) were males. Thirty-six of the females were younger than 18 years (65.5%), and 19 (34.5%) were older than 18 years (i.e., adults). Age determination was requested for 44 (78.6%) of the 56 females. Age was determined using the method described in a previous study by Şişman et al., in which age was evaluated according to the developmental stage of the third molars (13). Of the 44 females referred for age determination, 8 (18.2%) patients were older than 18 years, and 36 (81.8%) patients were younger than 18 years. The χ^2 test was used to evaluate age determination and the status of being underage, and a significant correlation was found between the number of

underaged patients and the minority ($p = 0.000$, < 0.05) (Table 5). Twenty-nine of the 36 female patients who were underage due to their identity data were adults. Three underage female patients were considered to be older than 18 years after age determination. As three underage females were pregnant, age determination was postponed until post-partum. One patient's age could not be determined because the third molar teeth were congenitally missing (Table 5).

Assault

The forensic medicine department referred 30 patients (males, n = 25) for post-assault examination.

Neonatology

In total, 11 patients were referred from the department of neonatology. Five patients (two males and three females) were referred for natal teeth and six for cleft lip and palate (five males and one female) examinations. The patients with cleft lip and palate were referred to the department of orthodontics for nasoalveolar molding. Natal teeth extractions were postponed until discharge of the neonates from the newborn department.

Oncology

Twenty-three patients (males, n = 17 [73.9%], females, n = 6 [26.1%]) were referred from the oncology department. Of 12 patients admitted for examination and control before or after bisphosphonate treatment, 10 were males. Patients were referred from the oncology department from 2018 onwards to the OMFS clinic. Of seven patients referred for dental abscesses, five were males (Table 6).

Table 4. Departments requesting consultation - The applied treatments and procedures

Applied Treatments	Emergency Medicine	Forensic Medicine	Pediatrics	Otorhino-laryngology	Neurology-Neurosurgery	Oncology	Orthopedics	Neonatology	Other	Total
Age determination	0	50	0	0	0	0	0	0	0	50
Teeth extractions	0	2	3	5	2	13	1	0	7	33
Clinical follow-up	2	10	0	0	2	2	0	0	2	18
Referrals to another department of dentistry	0	7	0	0	1	2	1	6	1	18
Medical or simple interventional treatments	0	7	1	0	0	0	3	0	2	13
Operations under general anesthesia	1	7	0	2	1	0	0	0	1	12
No pathology was observed	0	6	0	1	0	5	0	0	0	12
TMD treatments	1	1	0	0	0	1	0	0	4	7
Post-discharge interventions	0	0	1	0	0	0	1	5	0	7
Late application after consultation	0	6	0	0	0	0	0	0	0	6
Other	0	1	0	0	0	0	0	0	1	2
Total	4	97	5	8	6	23	6	11	18	178
	2.2%	54.5%	2.8%	4.5%	3.4%	12.9%	3.4%	6.2%	10.1%	100.0%

Table 5. Age distribution of patients consulted from the department of forensic medicine

Forensic Medicine			p-value
		Number of Patients	
Under 18 Years	Female	36	0.000
	Male	2	
	Total	38	
Over 18 Years	Female	8	
	Male	4	
	Total	12	
Total	Female	44	
	Male	6	
	Total	50	

Table 6. Patients consulted from the oncology department

Reasons For Consultation										Applied Treatments			
Abscess	TMJ Disorders	Bisphosphonate Therapy	Oral Pathology	Idiopathic Pain	Total	Clinical Follow-Up	Tooth Extraction	TMJ Treatment	Referral To Another Department	No Pathology Observed	Total		
2	0	2	1	1	6	1	3	1	0	1	6		
Female	33.3%	0.0%	16.7%	16.7%	100.0%	16.7%	50.0%	16.7%	0.0%	16.7%	100.0%		
Gender	5	2	0	0	17	1	10	0	2	4	17		
	Male	29.4%	11.8%	0.0%	100.0%	5.9%	58.8%	0.0%	11.8%	23.5%	100.0%		
Total	7	2	12	1	23	2	13	1	2	5	23		
	30.4%	8.7%	52.2%	4.3%	100.0%	8.7%	56.5%	4.3%	8.7%	21.7%	100.0%		

Discussion

To the best of our knowledge, the current study is the first to analyze the contents of referrals and referral departments in oral and maxillofacial surgery. In today's context, the necessity of managing diagnosed diseases via a multidisciplinary approach elucidates the current study's results and will guide further studies.

Forensic medicine has become increasingly important in the field of medical sciences. Forensic dentistry provides unique services, such as identity (ID) determination based on morphological differences in palatal rugae (14), dental tissues (15), and remnants (16). Forensic dentistry can also be used in age determination based on dental records (13) and hand-wrist radiographs (17) and in gender and race determination (18). Dental tissues can be used as sources of DNA in trauma cases, including traffic accidents, assaults, and falls (19), as well as in bite marks (20) and lip prints (18). In addition, they can be used as sources of DNA for gender and ID determination in artificial or natural disasters (21) and in domestic violence and child abuse cases (22). The current study provides insights into many aspects of forensic dentistry at a regional level. We describe the involvement of maxillofacial surgeons in forensic processes in a variety of areas, such as age determination, assaults, traffic accidents, maxillofacial trauma due to falling from a height, and in consultations with forensic medicine units. Females accounted for the majority of age determination requests/referrals from the forensic medicine unit. In the majority of cases where age determination was requested and performed, the patient was underage. Age determination could not be performed in a few cases due to pregnancy.

Dental or maxillofacial trauma after falling from a height was more common among females than males. However, in the present study, the prevalence of male referrals due to assaults or traffic accidents was significantly higher than that of female referrals. When the medical documentation records of the 97 patients included in the current study were examined, the interventions performed were as follows: tooth extraction, patient follow-up, referral to another department, medical procedures or simple procedures, or operations under general anesthesia. In some cases, no procedure was performed as a result of late admission or lack of necessity. In other cases, follow-up visits were planned due to the absence of any obvious pathology. The present results reveal the important relationship between forensic medicine and forensic dentistry.

According to the current results, oncology was the second department that directed the most patients for consultation and treatment. The increase in the use of bisphosphonates in the treatment of malignancy and the associated drug-induced osteonecrosis of the jaws (23) have reached non-negligible numbers. Most of the consultations referred from the oncology department consisted of patients who were requested to have a comprehensive examination of the oral or dental tissues

before or after the bisphosphonate medication. Considering the current potential of oncology clinics, although 12 patients are thought to be few, this is important in creating awareness in the understanding of drug-induced osteonecrosis. Also, patients who applied with written consultation notes and were referred with outpatient referrals were not included in the study, creating an obstacle in determining the actual number of patients. The increase in directed consultations from oncology since 2018 is essential, as it shows the results of a meeting between local departments this year. This consequence reveals the importance of the interdisciplinary exchange of ideas and communication. It is also observed that oncological patients were consulted for various reasons, such as dental abscesses, TMD, oral cavity pathologies, and idiopathic pain. The fact that oral cancer cases were not observed among the consulted patients is a result of the follow-up of these patients by an institutionally formed Tumor Council following the diagnosis of oral cancer. This institution-wide Tumor Council consists of physicians and support teams in oncology, radiation oncology, pathology, radiology, head and neck surgery, oral and maxillofacial surgery, and other related specialties. The management of all oral cancer cases progresses under the supervision of this council, from diagnosis to treatment.

Considering neonatology consultations, five patients were consulted for natal teeth and six for cleft lip and palate. All of the patients consulted for cleft lip and palate were referred to the orthodontic clinic for nasoalveolar molding. Extraction of the relevant teeth was planned after discharge in all patients with natal teeth. All patients referred from the otorhinolaryngology were consulted with indications, such as dental abscesses, deep neck infections, or cystic lesions of odontogenic origin. Patients sent from pediatrics and intensive care units were similarly referred for dental abscesses or toothaches. Six patients referred from neurology and neurosurgery were consulted for indications such as dental trauma during intubation, risk of intubation of mobile teeth in unconscious patients, head trauma, and mandible fracture due to falling from a height and assault. It has been observed that patients were consulted in cases such as bleeding, mandibular fracture, and dental trauma observed in the late period after oral surgical procedures from the emergency department. Also, in various medical specialties, such as plastic and reconstructive surgery, cardiovascular surgery, internal medicine, ophthalmology, sleep medicine, urology, pulmonology, gastroenterology, palliative care center, and infectious diseases, the patients were consulted to perform intraoral examinations for evaluation of TMD, odontogenic infections, preseptal and orbital cellulitis, obstructive sleep apnea, mandible fracture, pre-endoscopy dental examination, idiopathic fever, and before coronary bypass surgery.

Dental interventions often require close collaboration between dental and medical practitioners. A physician referral or consultation order prior to dental treatment may be necessary to determine a patient's

systemic status. This situation reveals the expectations of dentists from medical practitioners in treatment processes and patient management and illuminates one aspect of interdisciplinary cooperation. Existing studies reflect only the dentistry side of this cooperation, mainly on referrals, collaboration, and multidisciplinary approaches between dental specialties (24-27). This research has focused on the collaboration, interaction, and multidisciplinary approach between medical practitioners and maxillofacial surgeons. Forensic dentistry (28), management of head and neck malignancies and treatment complications (29, 30), maxillofacial trauma (31), dental trauma (32), drug-induced osteonecrosis (33), management of odontogenic lesions (34, 35), and exceptional cases such as congenital anomalies (36) reveal the importance of interdepartmental cooperation and multidisciplinary management.

The limitation of the current study is that the included patient population consisted only of patients who were directed through the hospital information management system. This situation hindered the inclusion of patients who applied with written consultation notes or patients who applied to the clinic with outpatient visits.

Conclusion

The current study indicates that the maxillofacial surgery clinic is closely associated with many medical disciplines, especially forensic medicine, oncology, otorhinolaryngology, and neonatology. Similar studies are needed to understand the extent of existing collaborations between medical-based physicians and dentistry branches and to determine in which processes more interaction is required.

Disclosures

Ethical Approval: Ethics committee approval was received for this study from Clinical Research Ethical Committee of the Faculty of Medicine of Tokat Gaziosmanpaşa University, in accordance with the World Medical Association Declaration of Helsinki, with with registration number 21-KAEK-274. (ClinicalTrials.gov Identifier: NCT05454384, registration date: 11.07.2022)

Peer-review: Externally peer-review.

Author Contributions: Conception - S.Ç.; Design - S.Ç., M.S.D.; Supervision - A.E., N.A.; Materials - S.Ç., M.S.D., A.E.; Data Collection and/or Processing - S.Ç., G.K.; Analysis and/or Interpretation - S.Ç., M.S.D., G.K.; Literature Review - S.Ç., A.A., N.A.; Writer - S.Ç.; Critical Review - A.A., N.A.

Conflict of Interest: No conflict of interest was declared by the authors.

Funding: The authors declared that this study has received no financial support.

References

1. Sippli K, Rieger MA, Huettig F. GPs' and dentists' experiences and expectations of inter-professional collaboration: findings from a qualitative study in Germany. *BMC Health Serv Res* 2017;17(1):179. <https://doi.org/10.1186/s12913-017-2116-4>
2. Rasmussen CM, McMillan KB, McMillan DC, Assael LA, Arce K. Education Solutions to the Medical-Dental Divide. *AMA J Ethics* 2022;24(1):E27-32. <https://doi.org/10.1001/amajethics.2022.27>
3. Baltacıoğlu A, Baltacıoğlu İ. Türkiye'de Diş Hekimliği Eğitim ve Öğretimi (1908-1933). *Osmanlı Bilimi Araştırmaları* 2010;11(1):159-202.
4. Tuckett JW, Lynham A, Lee GA, Perry M, Harrington U. Maxillofacial trauma in the emergency department: a review. *Surg J R Coll Surg Edinb Irel* 2014;12(2):106-14. <https://doi.org/10.1016/j.surge.2013.07.001>
5. Taberna M, Gil Moncayo F, Jané-Salas E, Antonio M, Arribas L, Vilajosana E, et al. The Multidisciplinary Team (MDT) Approach and Quality of Care. *Front Oncol* 2020;10:85. <https://doi.org/10.3389/fonc.2020.00085>
6. Avon SL. Forensic odontology: the roles and responsibilities of the dentist. *J Can Dent Assoc* 2004;70(7):453-8.
7. Yadav V, Kumar V, Sharma S, Chawla A, Logan A. Palliative dental care: Ignored dimension of dentistry amidst COVID-19 pandemic. *Spec Care Dent Off Publ Am Assoc Hosp Dent Acad Dent Handicap Am Soc Geriatr Dent* 2020;40(6):613-5. <https://doi.org/10.1111/scd.12517>
8. Nicolatou-Galitis O, Schiødt M, Mendes RA, Ripamonti C, Hope S, Drudge-Coates L, et al. Medication-related osteonecrosis of the jaw: definition and best practice for prevention, diagnosis, and treatment. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2019 Feb 1;127(2):117-35. <https://doi.org/10.1016/j.oooo.2018.09.008>
9. Migliorati CA, Brennan MT, Peterson DE. Medication-Related Osteonecrosis of the Jaws. *J Natl Cancer Inst Monogr* 2019;2019(53):lgz009. <https://doi.org/10.1093/jncimonographs/lgz009>
10. Chronopoulos A, Zarra T, Tröltzsch M, Mahaini S, Ehrenfeld M, Otto S. Osteoradionecrosis of the mandible: A ten year single-center retrospective study. *J Cranio-Maxillofac Surg* 2015;43(6):837-46. <https://doi.org/10.1016/j.jcms.2015.03.024>
11. Crockett DJ, Goudy SL. Cleft lip and palate. *Facial Plast Surg Clin N Am* 2014;22(4):573-86. <https://doi.org/10.1016/j.fsc.2014.07.002>
12. Bui FQ, Almeida-da-Silva CLC, Huynh B, Trinh A, Liu J, Woodward J, et al. Association between periodontal pathogens and systemic disease. *Biomed J* 2019;42(1):27-35. <https://doi.org/10.1016/j.bj.2018.12.001>
13. Sisman Y, Uysal T, Yagmur F, Ramoglu SI. Third-molar development in relation to chronologic age in Turkish children and young adults. *Angle Orthod* 2007;77(6):1040-5. <https://doi.org/10.2319/101906-430.1>
14. Sha SK, Rao BV, Rao MS, Kumari KVH, Chinna SK, Sahu D. Are Tooth Prints a Hard Tissue Equivalence of Finger Print in Mass Disaster: A Rationalized Review. *J Pharm Bioallied Sci* 2017;9(Suppl 1):S29-33. https://doi.org/10.4103/jpbs.JPBS_131_17
15. Deadman WJ. The Identification of Human Remains. *Can Med Assoc J* 1964;91(15):808-11.
16. Clark DH. An analysis of the value of forensic odontology in ten mass disasters. *Int Dent J* 1994;44(3):241-50.

17. Cummaudo M, De Angelis D, Magli F, Minà G, Merelli V, Cattaneo C. Age estimation in the living: A scoping review of population data for skeletal and dental methods. *Forensic Sci Int* 2021;320:110689. <https://doi.org/10.1016/j.forsciint.2021.110689>
18. Nagare SP, Chaudhari RS, Birangane RS, Parkarwar PC. Sex determination in forensic identification, a review. *J Forensic Dent Sci* 2018;10(2):61-6. https://doi.org/10.4103/jfo.jfds_55_17
19. Pawar RK, More CB. Sex determination from tooth pulp deoxyribonucleic acid using polymerase chain reaction. *J Forensic Dent Sci* 2018;10(2):107-10. https://doi.org/10.4103/jfo.jfds_67_16
20. Maji A, Khaitan T, Sinha R, Sarkar S, Verma P, Shukla AK. A Novel Computer-Assisted Method of Bite Mark Analysis for Gender Determination. *J Environ Public Health* 2018;2018:7130876. <https://doi.org/10.1155/2018/7130876>
21. Prajapati G, Sarode SC, Sarode GS, Shelke P, Awan KH, Patil S. Role of forensic odontology in the identification of victims of major mass disasters across the world: A systematic review. *PloS One* 2018;13(6):e0199791. <https://doi.org/10.1371/journal.pone.0199791>
22. Hinchliffe J. Forensic odontology, part 5. Child abuse issues. *Br Dent J* 2011;210(9):423-8. <https://doi.org/10.1038/sj.bdj.2011.332>
23. Ishimaru M, Ono S, Morita K, Matsui H, Hagiwara Y, Yasunaga H. Prevalence, Incidence Rate, and Risk Factors of Medication-Related Osteonecrosis of the Jaw in Patients With Osteoporosis and Cancer: A Nationwide Population-Based Study in Japan. *J Oral Maxillofac Surg Off J Am Assoc Oral Maxillofac Surg* 2022;80(4):714-27. <https://doi.org/10.1016/j.joms.2021.12.007>
24. Flanagan D, Palmer OC. Issues in Referring to Specialists J Oral Implantol. 2016;42(3):231. <https://doi.org/10.1563/aaaid-joi-D-16-00085>
25. Tong DC. Surgical management in dentistry: the interdisciplinary relationship between per-iodontology and oral and maxillofacial surgery. *Periodontol* 2000 2017;74(1):168-75. <https://doi.org/10.1111/prd.12196>
26. Kaner KH. Referral and Management Considerations for a Biopsy: Why Choose the Oral and Maxillofacial Surgeon. *Dent Clin North Am* 2020;64(1):241-7. <https://doi.org/10.1016/j.cden.2019.08.013>
27. Kraatz J, Hoang H, Ivanovski S, Ware RS, Crocombe LA. Non-clinical factors associated with referral to periodontal specialists. *J Periodontol* 2019;90(8):877-83. <https://doi.org/10.1002/JPER.18-0642>
28. Mohammed F, Fairozekhan AT, Bhat S, Menezes RG. Forensic Odontology. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 [cited 2022 Apr 15]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK540984/>
29. Sroussi HY, Epstein JB, Bensadoun RJ, Saunders DP, Lalla RV, Migliorati CA, et al. Common oral complications of head and neck cancer radiation therapy: mucositis, infections, saliva change, fibrosis, sensory dysfunctions, dental caries, periodontal disease, and osteoradionecrosis. *Cancer Med* 2017;6(12):2918-31. <https://doi.org/10.1002/cam4.1221>
30. Smojver I, Vuletić M, Manojlović S, Gabrić D. Multidisciplinary Approach to Rehabilitation after Tumor Resective Jaw Surgery: A 9-Year Follow-Up. *Case Rep Dent*;2020:8867320. <https://doi.org/10.1155/2020/8867320>
31. Brucoli M, Boffano P, Romeo I, Corio C, Benech A, Ruslin M, et al. Management of maxillofacial trauma in the elderly: A European multicenter study. *Dent Traumatol Off Publ Int Assoc Dent Traumatol* 2020;36(3):241-6. <https://doi.org/10.1111/edt.12536>
32. James V, Vandersluis YR, Zhang EWJ, Scolnik D. Dental injuries in younger emergency department patients. *CJEM* 2018;20(3):425-31. <https://doi.org/10.1017/cem.2017.52>
33. Otto S, Pautke C, Van den Wyngaert T, Niepel D, Schiødt M. Medication-related osteonecrosis of the jaw: Prevention, diagnosis and management in patients with cancer and bone metastases. *Cancer Treat Rev* 2018;69:177-87. <https://doi.org/10.1016/j.ctrv.2018.06.007>
34. Shanti RM, Alawi F, Lee SM, Henderson AJ, Sangal NR, Adappa ND. Multidisciplinary approaches to odontogenic lesions. *Curr Opin Otolaryngol Head Neck Surg* 2020;28(1):36-45. <https://doi.org/10.1097/MOO.0000000000000603>
35. Zheng HY, Li ZX, Niu ZX, Su L, Zhao JF, Sun ML, et al. [Retrospective analysis of the effectiveness of treating multi-space infection combined with descending necrotizing mediastinitis at oral maxillofacial and cervical region via multidisciplinary team collaboration]. *Zhonghua Kou Qiang Yi Xue Za Zhi Zhonghua Kouqiang Yixue Zazhi Chin J Stomatol* 2020;55(12):952-7.
36. Preidl RHM, Kesting M, Rau A. Perioperative Management in Patients With Cleft Lip and Palate. *J Craniofac Surg* 2020;31(1):95-101. <https://doi.org/10.1097/SCS.00000000000005897>