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CLINICAL APPLICATION OF THE MANDIBULAR FUNCTION IMPAIRMENT QUESTIONNAIRE

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Objectives: The Mandibular Functional Impairment Questionnaire (MFIQ) was developed in 1993 for clinical assessment of functional impairment in patients with temporomandibular disorder (TMD). The MFIQ contains 17 items, rated on a 5-point Likert scale, and covers 10 items relating to mastication, 5 items on interpersonal contact, and 2 items on nonmasticatory function.

Study Design: A preliminary retrospective study was conducted at a private oral medicine/orofacial pain clinic to examine the clinical application of the MFIQ. Thirty-eight patients were randomly selected. All patients had filled out the MFIQ at the initial appointment before diagnosis.

Results: Of the 38 patients reporting orofacial pain at presentation, 2 were diagnosed with headache pain (HA), 13 had oral issues (OC) including sensory change or lichen planus, 21 had TMD, and 2 had trigeminal neuralgia (TN). Patients with OC were significantly older (65.8 ± 10.1 years) than patients with HA (35.0 ± 11.3 years, P = .036) and TMD (41.4 ± 16.3 years, P < .001). The categories that were rated to be more difficult in TMD compared with HA, OC, and TN are “taking a large bite” (2.1 ± 1.3; P = .003) or “chewing resistant food” (2.0 ± 1.3, OC 0.8 ± 1.5, P = .50), “yawning” (1.5 ± 1.1; 0 ± 0, P < .001; 0.2 ± 0.6, P = .001; 0 ± 0, P < .001), and “kissing” (1.2 ± 1.4; 0 ± 0, P = .007; P = .007). Other items on the MFIQ did not return significance on analysis between groups. No difference in calculated level of function impairment (P = .086) or qualitative level of functional impairment score (P = .197) was found between groups.

Conclusions: Calculated level of function impairment and impairment score do not appear to be effective in differentiating TMD from other patients with orofacial pain. However, items associated with masticatory function (taking a large bite, chewing resistant food) and yawning and kissing are reported to be more difficult in TMD. Certain items on the MFIQ appear to have more application in differentiating TMD from other causes of orofacial pain.

COMPARING SHORT- AND LONG-TERM TMD PAIN COMORBIDITIES: A CROSS-SECTIONAL STUDY AMONG ADOLESCENTS

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Objectives: The primary aim of this study was to compare painful and nonpainful comorbidities between short- and long-term temporomandibular disorder (TMD) pain. The secondary aim was to assess the impact of persistent TMD pain on school absence.

Study Design: Adolescents were enrolled in Montreal (Canada), Nice (France), and Arceburgo (Brazil). The presence of TMD pain, comorbidities (i.e., asthma, allergies, back pain, neck pain, stomach pain, and headache), and school absence were assessed using reliable and validated questionnaires. TMD pain lasting <6 months was considered short-term, and that lasting ≥6 month was deemed long-term. Chi-square tests and analysis of variance were used to test statistical differences between adolescents with short- and long-term TMD pain and those without (controls). Univariate and multivariate unconditional nominal logistic regression analyses were used to assess the association between TMD pain (dependent variable) and the independent variables.

Results: This study enrolled 1400 adolescents with short-term (n = 312, 22.29%) and long-term (n = 139, 9.93%) TMD pain and controls (n = 949, 67.79%). The number of comorbidities was associated with short-term (odds ratio [OR] = 1.71; 95% confidence interval [CI], 1.53-1.90) and long-term (OR = 1.79; 95% CI, 1.55-2.08) TMD pain compared with controls. Allergies were only associated with short-term TMD pain (OR = 1.54; 95% CI, 1.13-2.10). In comparison to controls, adolescents with long- and short-term TMD pain were more likely to have frequent headaches (>once a week; OR short-term = 4.39; 95% CI, 3.23-5.98; OR long-term = 3.69; 95% CI, 2.45-5.57) and frequent back pain (OR short-term = 1.46; 95% CI, 1.06-2.03; OR long-term = 1.69; 95% CI, 1.11-2.59). Frequent stomach pain was only associated with long-term TMD pain (OR = 2.01; 95% CI, 1.35-3.26), whereas frequent neck pain was only associated with short-term TMD pain (OR = 2.23; 95% CI, 1.53-3.26). Adolescents with long-term TMD pain had higher rates of missing school than those with short-term TMD pain (n long-term = 39, 28.26%; n short-term = 48, 15.43%; P = .0015).

Conclusions: Frequent headache and back pain are very common among adolescents with both short- and long-term TMD pain. The specific association between stomach pain and long-term TMD pain suggests a central dysregulation mechanism.

COVID-19 RISK ASSESSMENT OF DENTAL SCHOOL PATIENTS FOR SAFE CLINICAL CARE STRATEGIES Catherine Flaitz, Lonnie Johnson, Ryan Peterson, Pinn Becker, Ying Jin, Kentaro Ikeda, and Denise Kassebaum
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Objectives: This quality improvement and safety project assessed the coronavirus disease 2019 (COVID-19) risk factors of the patient population at the University of Colorado School of Dental Medicine for the purpose of developing an operational strategy for modifying patient care protocols and clinic infrastructure during the pandemic.
Study Design: The data consist of retrospectively collected information on all patients treated at the University of Colorado School of Dental Medicine between March 1, 2019, and March 31, 2020, retrieved from the electronic dental health record. Variables of interest focused on patients treated by predoctoral students and included age group, race/ethnicity, and major comorbidities for COVID-19 risk. Patients were placed into 3 risk categories based on age and health status: Minimal (no comorbidities), high (comorbidities), and highest (>65 years and comorbidities). Descriptive statistics were calculated on the cohort. No hypothesis testing or statistical inference was employed.

Results: A total of 10,958 patients, with a median age of 53 (interquartile range, 34, 67) and equal sex distribution (F = 50%; M = 49.8%), treated by predoctoral students were identified. White, Hispanic, black, and mixed race accounted for 58.4%, 20.9%, 13.1%, and 2.2%, respectively. Regarding major comorbidities, 29.9% had 1, 14.8% had 2, and 9.1% had ≥3 (median = 1; interquartile range, 0, 1), with 53.5% of those ≥65 years having 3+ diseases. The most common comorbidities were cardiovascular disease (24.5%); diabetes (9.9%); immunocompromised, including HIV; and chronic corticosteroid use (9.5%), cancer (8.2%), and pulmonary disease (7.9%). The prevalence of tobacco smoking was 26.5%. Most patients were defined as high (30.9%) or highest (23%) risk, with 77.5% of those ≥75 years in the highest risk category. Stratifying by race/ethnicity, those with ≥1 comorbidities were distributed as follows: white = 62.3%, black = 56.8%, Hispanic = 40.4%, and mixed race = 64.4%.

Conclusions: Most patients treated by predoctoral dental students in the main clinic were classified as high or highest risk for COVID-19 infection, and this risk increased with age. Information from this quality improvement project was critical for understanding the medical complexity of the patient pool and justifying major scheduling and infrastructure changes for safe delivery of clinical care in an academic environment.

TELEMEDICINE FOR SYMPTOMS MANAGEMENT IN ORAL MEDICINE Zahra Ali Alsafwani, Caroline Shiboski, and Alessandro Villa, University of California San Francisco, San Francisco, CA, USA

Objectives: The recent coronavirus disease 2019 pandemic has caused a significant drop in visits to dental and medical practices. Following the shelter-in-place orders across the United States, we have implemented tele (oral) medicine for the diagnosis and management of oral medical conditions. We aimed to (1) characterize a cohort of oral medicine patients seen via telemedicine and (2) assess the effectiveness of telemedicine visits in terms of pain control in patients affected by oral diseases.

Study Design: A retrospective chart review for patients seen via telemedicine was conducted between March 2020 and December 2020. Sociodemographic information, home ZIP code, referring doctor and type of insurance, and clinical diagnosis were collected and entered into an electronic database. The pain score was recorded at each visit using a 0 to 10 scale. Descriptive statistics were used to calculate median and range. Differences in oral pain were evaluated using the Wilcoxon signed-rank test.

Results: A total of 137 new patients were included (57% female), with a median age of 56 years (range, 3-89). If seen in person, patients would have traveled a median distance of 65 miles (range, 0.9-100). More than half of the patients (n = 82; 59.8%) were referred by physicians, with the greatest proportion coming from primary care physicians (n = 47; 34.3%) and otolaryngologists (n = 17; 12%).

The most common oral conditions seen were reactive/inflammatory lesions (n = 70; 51%), orofacial pain disorders (n = 18; 13.1%), and immune-mediated conditions (n = 17; 12.4%). One third of patients (n = 51; 37%) required an oral biopsy. Imaging and laboratory studies were ordered in 9.4% and 2.1% patients, respectively. Most patients (n = 92; 67.1%) had their visit covered by private medical insurance, 9 by dental insurance (6.5%), and 31 by Medicare (22.6%), and 5 were self-pay (3.6%).

When pain was considered, there was a 3-point median pain reduction from the first video visit to the first follow-up (P < .05) and a self-reported 65% (range, 0%-100%) median improvement of oral symptoms.

Conclusions: Tele (oral) medicine was an effective method for the diagnosis and treatment of oral medical conditions. Tele (oral) medicine may be used in the future for an initial screening of oral mucosal conditions and to improve access to care.

THE ROLE OF CONSERVATIVE MANAGEMENT IN PATIENTS WITH MEDICATION-RELATED OSTEONECROSIS OF JAW: A MEMORIAL SLOAN KETTERING CANCER CENTER EXPERIENCE Andrew Marco Pischek, Annu Singh, Dennis Shen, Joseph Randazzo, Saeehee Yom, Joseph Huryn, and Cherry Estilo, Memorial Sloan Kettering Cancer Center, New York, NY, USA

Objectives: Medication-related osteonecrosis of jaw (MRONJ) is a debilitating disease that may affect the quality of life in patients on antiresorptive treatment. The aim of this study is to report our institution’s experience in conservative management of a cohort of oncologic patients who developed MRONJ after antiresorptive treatment.

Study Design: Patients included in this 19-year retrospective single-center study fulfilled the following criteria: (1) received treatment at Memorial Sloan Kettering Cancer Center with pamidronate, zoledronic acid, and/or denosumab for bone metastasis or multiple myeloma and (2) diagnosed with MRONJ and followed for at least 12 months in the Dental Service of MSKCC between 1999 and 2018. Various demographic and treatment-related variables including the number of medication doses, time to onset of MRONJ, and clinical outcome associated with different interventions were analyzed.

Results: One hundred ten patients (46 men, 64 women) were included in the study. Breast cancer was the primary diagnosis in 53 patients (48%). Zoledronic acid (n = 71, 64.5%) was the most commonly prescribed first antiresorptive medication and 58 patients were switched to another antiresorptive medication after the onset of MRONJ (53%). The median time interval between the first medication onset and MRONJ diagnosis was 28 months (range, 1-163). The median number of first medication doses before development of MRONJ was 22, 23, and 19 for denosumab (range, 1-38), pamidronate (range, 1-70), and zoledronic acid (range, 1-60), respectively. Fifty-two patients received treatment at Memorial Sloan Kettering Cancer Center, New York, NY, USA.

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