Peer Review File

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Reviewer A:

Comment 1: In the overview of TMD, while talking about the DC/TMD please mention masticatory muscle disorders too as myofascial pain myalgia [Page 4].

Reply: We have modified our text as advised.

Changes in the text: We have replaced “myalgia” with “masticatory muscle disorders” (see Page 6, line 114)

Comment 2: In the management options of TMD authors mention the name trigger point injections but there are no reference studies. Just check it once in the literature. I am not sure if there is any trial on trigger point injections using local anesthetic compared with placebo [Page 7-8].

Reply: We have added a discussion of the current literature, and a reference, as advised.

Changes in the text: We added “The current literature lacks placebo-controlled studies. A blinded, randomized study comparing trigger point injections to massage and stretch found both to decrease pain intensity, but without significant difference between the two treatments (27)” (see Page 10, lines 199-202)

This reference is “Okada-Ogawa A, Sekine N, Watanabe K, Kohashi R, Asano S, Iwata K, Imamura Y. Change in muscle hardness after trigger point injection and physiotherapy for myofascial pain syndrome. J Oral Sci. 2019 Mar 28;61(1):36-44. doi: 10.2334/josnusd.17-0453. Epub 2018 Dec 20. PMID: 30568046.

Comment 3: On page 9 while talking about trigeminal autonomic orofacial pain including cluster headache…, please add paroxysmal hemicrania and hemicrania continua.

Reply: We have added those conditions as advised

Changes in the text: We have added, “paroxysmal hemifacial pain, and hemifacial continuous pain with autonomic symptoms” (see Page 12, lines 243-244)

Comment 4: Last in headache section authors did a great job. But, since you have discussed only Migraines and TTHAs, do you think it is worth to include cluster paroxysmal hemicranial?

Reply: We have added sections on cluster headache treatment and paroxysmal hemicrania, as well as other trigeminal autonomic cephalgias, as advised

Changes in the text: Additions are too long to quote here (see Page 17, lines 363-370, and Pages 23-24, lines 494-515)

Reviewer B:

Comment 1: It does not consider current classification systems for orofacial pain e.g. ICOP and the updated International Headache Society Criteria. The authors have included TMD, neuropathic pain and headache in the OFP subtypes they wish to review. However, there is no logic or discussion as to why they have gone for this choice. They give no definition of what they mean by OFP. This term includes all acute and chronic pains including toothache. Authors need to revisit the definition of OFP and will then realise that lumping of TMDs, neuropathic pain and headache as OFP is incorrect at best. A better review might have looked at chronic primary oro-facial pains?

Reply: The title of the article has been changed as advised, so as not to be inconsistent with the ICOP definition of OFP.

Changes in the text: Title has been changed to "Temporomandibular Disorders, Neuropathic and Idiopathic Orofacial Pain, and Headaches: A Literature Review"

Abstract changed from "Orofacial pain encompasses temporomandibular disorders, neuropathic and nociplastic pain, and headaches" to "Temporomandibular disorders, headaches, and neuropathic, nociplastic, and idiopathic orofacial pain overlap several specialties for diagnosis and management." (see Page 3, lines 43-44)

Abstract changed from "Internationally-accepted diagnostic criteria now exist all types of temporomandibular disorders, headaches, and neuropathic, nociplastic, and idiopathic orofacial pain." to "Internationally-accepted diagnostic criteria now exist all types of temporomandibular disorders, headaches, and neuropathic, nociplastic, and idiopathic orofacial pain." (see Page 3, lines 51-53)

Abstract changed from "The diagnosis of OFP" to "The diagnosis of these pain conditions" (see Page 3, line 59)

Introduction changed from "Orofacial pain (OFP) includes temporomandibular

disorders (TMD), neuropathic and nociplastic pain, and headaches" to "Temporomandibular disorders (TMD), headaches, and neuropathic, nociplastic, and idiopathic orofacial pain" (seePage 4, lines 65-66)

Introduction changed from "The purpose of this review is to update the reader on the current evidence regarding diagnosis and management of OFP" to "The purpose of this review is to update the reader on the current evidence regarding diagnosis and management of these conditions" (see Page 4, lines 72-74)

Summary introductory sentence has changed from "The diagnosis of OFP" to "The diagnosis of these pain conditions" (see Page 24, line 518)

Comment 2: The methodology is weak. Search is incomplete and only includes PubMed. There is no clear search strategy or PRISMA flow diagram. There are no inclusion and exclusion criteria nor data extraction methods. Importantly included studies are not assessed for quality or compliance with inclusion and exclusion criteria. The strength of evidence of included studies cannot therefore be relied on. The rationale for a narrative review is unclear – why not a systematic review given the large number of studies available for inclusion?

Reply: Because our objective is to provide a broad overview to the reader on diagnostic criteria and treatments currently in use, a narrative review format was chosen.

Changes in the text: We added, "A systematic review utilizes more selective and rigorous search criteria and methodology to answer more focused questions. Because our objective is to provide a broad overview to the reader on diagnostic criteria and treatments currently in use, a narrative review format was chosen." (see Page 5, lines 87-90)

3. Management should rely on evidence base and effect size from systematic reviews of RCTs. The authors are advocating a plethora of management options for each of their subtypes (which as above are not OFP as headache is not classified in the definition of OFP). The appraisal is poor and therefore no definitive conclusions can be drawn on what works and what does not for these conditions. The review has potential to mislead readers into management options that do not work for these conditions.

Reply: This advice is sound, and much appreciated. For this review, of the 87 source articles used (not counting those used for introductory information, such as

epidemiological statistics, or diagnostic publications), 67% were systematic reviews or randomized controlled trials. For more rare conditions, or emerging treatments, when randomized controlled trials or systematic reviews were not available, we referenced the next best available evidence. However, we often failed to clarify in the main text which points were based on systematic reviews or randomized controlled trials, or weaker publications. We have now added that information into the main text.
Changes in the text: For each piece of information in the main text, we now specify the type of source (systematic review, randomized controlled trial, etc). They are too numerous to quote here.

Reviewer C:

Comment 1: There should be discussion on sensitisation which form a major part of chronic pain especially chronic TMD.
Reply: We have added this discussion as advised.
Changes in the text: Added "Sensitization and maladaptive thinking or behavior can develop and worsen over time, resulting in new or additional pathophysiology compared to when the pain was originally acute. This is at least partly why chronic pain, compared to acute pain, generally has differences in the management approach, needs more treatment, and usually has a less favorable prognosis. These mechanisms also apply to neuropathic and nociplastic pain and headache." (see Pages 6-7, lines 128-133)

Comment 2: More expansion on the Chronic Primary and chronic secondary pain should be done as this fits more in with the current model for TMD (ICD-11). More discussion on this would fit in with current evidence.
Reply: We have added a section as advised.
Changes in the text: Added the underlined portion: "divides these conditions further according to whether they are acute or chronic, primary or secondary, have referral, and by frequency. Primary pains are those for which a cause has not been determined. Secondary pains have an identified causative disorder, such as disc displacement or a generalized pain condition; if pain is to be alleviated, it would need to address the underlying disorder. Acute pains are those that started within the last three months, and chronic pains are must be present for more than three months. Sensitization and

maladaptive thinking or behavior can develop and worsen over time, resulting in new or additional pathophysiology compared to when the pain was originally acute. This is at least partly why chronic pain, compared to acute pain, generally has differences in the management approach, needs more treatment, and usually has a less favorable prognosis. These mechanisms also apply to neuropathic and nociplastic pain and headache." (see Pages 6-7, lines 123-133)

Comment 3: You need to either keep management of the various OFP conditions under separate conditions. For example you discuss botox under neuropathic and nociplastic pain but relate it to TMD?

Reply: We have added a section as advised.

Changes in the text: Added "Botox has also shown efficacy for neuropathic and nociplastic pain, and chronic migraine headaches, as will be discussed in subsequent sections." (see Page 10, lines 196-197)

Comment 4: In discussing Migraine there should be discussion on midfacial migraines.

Reply: We have added a section as advised.

Changes in the text: Added "Migraine, tension-type, and TAC symptoms can also present in solely the orofacial region. Their management tends to be the same as for their headache counterpart." (see Page 18, lines 369-370)

The following is also in the headache diagnosis section: "Another set of conditions newly classified in the ICOP is pains in the orofacial region that resemble headaches, such as orofacial migraine," (see Page 12 lines 241-242)

Comment 5: The discussion on trigeminal autonomic cephalalgias

Reply: We have added sections on cluster headache treatment and other trigeminal autonomic cephalgias, as advised.

Changes in the text: Additions are too long to quote here (see Pages 17, lines 363-368, and Pages 23-24, lines 494-515)

Comment 6: In Australia and New Zealand and other European countries Oral Medicine Specialists manage most of these Orofacial pain conditions and this has been omitted from the list.

Reply: We have added them as advised.

Changes in the text: Added “including oral medicine specialists” (see Page 4, line 67)