

Literature Search Results from PubMed at the US NLM

Scientific Investigation Committee 2018

Literature Abstract
Review 2018

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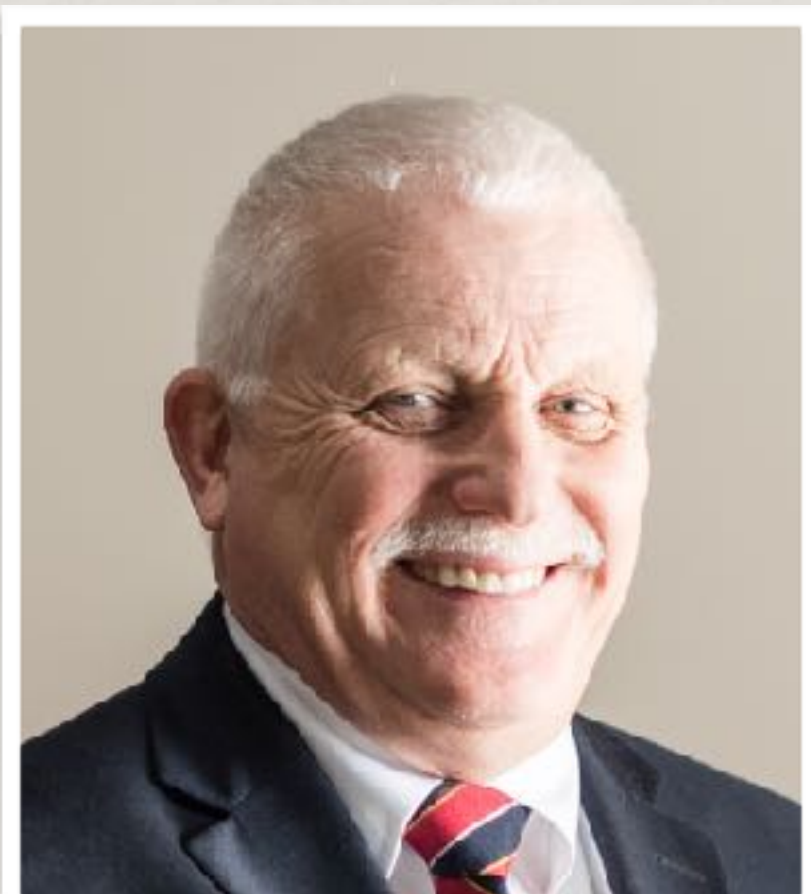
David Hancock



Aad Zonnenberg,
Chair



Jette Holbrook



Warren Jesek



Jack Marincel



Michael Radu



Tim Walker

Search Results

- ❖ Search results from NCBI (National Center for Biotechnology Information) at the NLM (US National Library of Medicine)
- ❖ Parameters of the search for new articles: from 2016/11/01 to 2017/11/01
- ❖ Search strategy HQ (PubMed): ("centric relation"[mh] OR "dental occlusion"[mh] OR dental occlusion OR ((bite OR mouth OR night OR occlusal) AND (guard* OR splint*)) OR "Occlusal Adjustment"[mh]) OR (occlusal AND (adjustment OR equilibration)) OR "Temporomandibular Joint Disorders"[mh] OR tmd OR ((temporomandibular OR craniomandibular) AND (disorder* OR dysfunction* OR disfunction*)) OR "Tooth Wear"[mh] OR ((tooth OR teeth OR dental) AND (abrasion OR attrition OR erosion OR abfraction OR grind*)) OR ((sleep OR nocturnal) AND bruxism*) OR "Sleep Bruxism"[mh]) AND (manag* OR treat* OR therap* OR "therapy" [Subheading]) Filters: English, Dental journals.

Search Results

- ❖ Search yielded 1067 articles.
- ❖ The search was divided in 185 high quality records (HQ) and 882 records named all items (AI)
- ❖ Out of 185 HQ records no abstracts available: 1, 3, 42, 137.
- ❖ Free HQ articles (open access): 2, 9, 10, 13, 14, 21, 25, 26, 27, 28, 36, 37, 39, 41, 44, 49, 50, 52, 53, 60, 61, 63, 64, 73, 74, 83, 85, 89, 92, 93, 96, 100, 106, 113, 116, 117, 127, 144, 157, 181.

Search Results

- ❖ Search 882 All items yielded 270 Open Access articles
- ❖ Free AI articles (open access): 2, 3, 4, 5, 6, 8, 9, 10, 17, 18, 19, 21, 23, 24, 28, 29, 30, 37, 38, 45, 48, 52, 53, 55, 58, 59, 61, 62, 73, 75, 76, 82, 83, 84, 89, 92, 98, 104, 107, 108, 109, 125, 126, 127, 129, 134, 136, 137, 138, 140, 141, 142, 143, 151, 152, 155, 157, 165, 171, 172, 179, 185, 188, 189, 195, 196, 199, 201, 202, 215, 216, 217, 219, 220, 223, 227, 228, 229, 231, 232, 236, 243, 244, 245, 262, 266, 269, 273, 275, 278, 279, 280, 283, 284, 285, 286, 289, 298, 304, 305, 306, 318, 329, 336, 337, 349, 361, 369, 370, 371, 372, 374, 375, 379, 380, 381, 383, 384, 395, 397, 399, 405, 408, 409, 410, 411, 413, 414, 416, 422, 425, 426, 428, 435, 442, 446, 447, 448, 449, 450, 455, 456, 463, 465, 467, 472, 473, 482, 483, 491, 492, 493, 495, 498, 501, 506, 511, 513, 514, 515, 520, 532, 535, 541, 543, 544, 548, 549, 555, 557, 558, 559, 560, 561, 573, 574, 575, 585, 586, 587, 589, 593, 595, 597, 600, 602, 604, 613, 628, 632, 638, 639, 640, 641, 644, 645, 646, 657, 659, 660, 662, 668, 680, 681, 682, 684, 685, 705, 706, 707, 708, 710, 713, 717, 718, 719, 721, 725, 732, 736, 740, 742, 743, 744, 745, 752, 763, 764, 765, 766, 768, 779, 780, 781, 782, 783, 788, 789, 794, 795, 796, 798, 803, 809, 851, 852, 853, 863, 864, 868, 870, 915, 923, 928, 934, 935, 940, 965, 970, 972, 978, 1001, 1007, 1014, 1033, 1943, 1045, 1049, 1051, 1067.

Search Results

- ❖ Articles from CRANIO: 37
- ❖ HQ: 179.
- ❖ AI: 67, 104, 130, 214, 218, 238, 287, 346, 373, 497, 510, 550, 620, 631, 648, 692, 848, 907, 916, 946, 948, 989, 993, 998, 1008, 1019, 1020, 1022, 1022, 1024, 1025, 1026, 1027, 1028, 1029, 1042.
- ❖ Articles from JPD: 22
- ❖ HQ: 94, 141, 157.
- ❖ AI: 78, 106, 293, 293, 294, 401,450, 509,536, 716, 820, 821, 846, 928, 979, 986, 987, 1010, 1011.

Levels of evidence

1. Meta-analysis / Systematic Review of RCTs
2. Randomized Controlled Trials (RCTs)
3. Controlled Clinical Trials (without randomization)
4. Case-Controlled / Cohort Studies
5. Narrative / Literature Review of Qualitative / Descriptive Studies
6. Qualitative or Descriptive Studies
7. Opinion / Editorial / Case Report / Product / Animal / In vitro / Finite Element

Levels of evidence (HQ)

1. Meta-analysis / Systematic Review of RCTs (46)
2. Randomized Controlled Trials (RCTs) (23)
3. Controlled Clinical Trials (without randomization) (10)
4. Case-Controlled / Cohort Studies (18)
5. Narrative / Literature Review of Qualitative / Descriptive Studies (12)
6. Qualitative or Descriptive Studies (10)
7. Opinion / Editorial / Case Report / Product / Animal / In vitro / Finite Element (12)

Levels of evidence (All items)

1. Meta-analysis / Systematic Review of RCTs (12)
2. Randomized Controlled Trials (RCTs) (11)
3. Controlled Clinical Trials (without randomization) (0)
4. Case-Controlled / Cohort Studies (46)
5. Narrative / Literature Review of Qualitative / Descriptive Studies (67)
6. Qualitative or Descriptive Studies (44)
7. Opinion / Editorial / Case Report / Product / Animal / In vitro / Finite Element (14)



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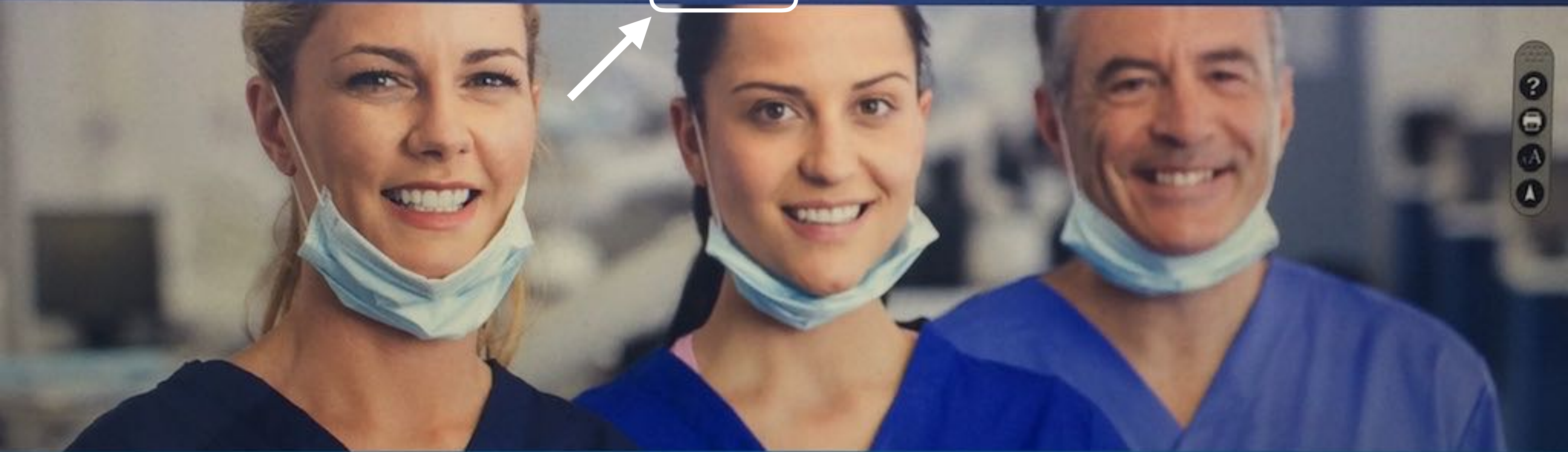
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The AES Scientific Investigation Committee is always looking for worthy research projects to support. For further information please contact committee chair Dr. Aad Zonnenberg at adriaanzonnenberg@me.com

The AES Scientific Investigation Committee completes a Scientific Literature Review annually.
The following links are available for your perusal:

[AES 2016 Literature Search Results](#)

[AES Lit Review Abstracts Presentation 2016-17](#)

[AES 2015-16 Scientific Literature Review Article Links](#)

[AES Literature Review 2014-15 & Abstracts](#)

[AES Literature Search - Abstract Review 2013](#)

[AES 2012 Literature Search Results](#)

[AES 2012 Literature Search](#)



Final instructions

- ❖ Click AES 2017 Literature Search Results
- ❖ This literature search has been divided in
 - ❖ 185 high quality records (HQ)
 - ❖ 1067 all items records (AI), example # 56
- ❖ This presentation mainly contains HQ records
- ❖ AES Lit Review Abstracts Presentation 2017-2018 contains this presentation

- [A Review on Detection and Treatment Methods of Sleep Apnea.](#)
53. Jayaraj R, Mohan J, Kanagasabai A.
J Clin Diagn Res. 2017 Mar;11(3):VE01-VE03. doi: 10.7860/JCDR/2017/24129.9535. Epub 2017 Mar 1. Review.
PMID: 28511486 [Free PMC Article](#)
- [The Prevalence of Oropharyngeal Dysphagia in Adults Presenting with Temporomandibular Disorders Associated with R](#)
54. [Systematic Review and Meta-analysis.](#)
Gilheaney Ó, Zgaga L, Harpur I, Sheaf G, Kiefer L, Béchet S, Walshe M.
Dysphagia. 2017 May 16. doi: 10.1007/s00455-017-9808-0. [Epub ahead of print] Review.
PMID: 28508937
- [Pathogenesis and FDG-PET/CT findings of Epstein-Barr virus-related lymphoid neoplasms.](#)
55. Toriihara A, Nakajima R, Arai A, Nakadate M, Abe K, Kubota K, Tateishi U.
Ann Nucl Med. 2017 Jul;31(6):425-436. doi: 10.1007/s12149-017-1180-5. Epub 2017 May 11. Review.
PMID: 28497429
- [Temporomandibular disorders and whiplash injury: a narrative review.](#)
56. Landzberg G, El-Rabbany M, Klasser GD, Epstein JB.
Oral Surg Oral Med Oral Pathol Oral Radiol. 2017 Aug;124(2):e37-e46. doi: 10.1016/j.oooo.2017.03.001. Epub 2017 Mar 10. Review.
PMID: 28483470
- [Treatment of Isolated Zygomatic Arch Fracture: Improved Outcomes with External Splinting.](#)
57. Hindin DI, Muefferties CE, Mehta C, Boukovalas S, Lee JC, Bradley JP.
Plast Reconstr Surg. 2017 May;139(5):1162e-1171e. doi: 10.1097/PRS.0000000000003281.

Format: Abstract ▾

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Oral Surg Oral Med Oral Pathol Oral Radiol. 2017 Aug;124(2):e37-e46. doi: 10.1016/j.oooo.2017.03.001. Epub 2017 Mar 10.

Temporomandibular disorders and whiplash injury: a narrative review.

Landzberg G¹, El-Rabbany M², Klasser GD³, Epstein JB⁴.

Author information

Abstract

OBJECTIVES: The objective of this study was to conduct a review investigating the relationship between temporomandibular disorders (TMDs) and whiplash injuries (WIs).

STUDY DESIGN: The authors conducted a search of PubMed/Medline, Cochrane Database, and EMBASE for studies discussing the prevalence, incidence, severity, treatment, and prognosis of TMDs following WIs. English language studies published between January 2010 and March 2016 were included. Study quality was assessed by using the Ottawa-Newcastle scale.

RESULTS: Eight studies investigating TMDs in patients with histories of WI were included. These studies reported associations between WIs and TMDs and an increase in symptom severity among patients with TMDs and a history of WIs. Additionally, patients with TMD and trauma histories display more severe subjective, objective, and psychological dysfunction compared with typical patients with TMDs. This results in poorer treatment outcomes.

CONCLUSIONS: These findings highlight the need for early evaluation of patients with WI for TMDs and for a multidisciplinary approach to their management.

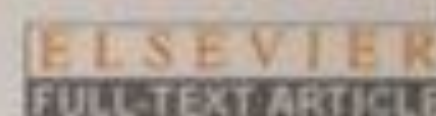
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PMID: 28483470 DOI: [10.1016/j.oooo.2017.03.001](https://doi.org/10.1016/j.oooo.2017.03.001)

[Indexed for MEDLINE]



Full text links



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Similar articles

Review Prevalence of whiplash trauma in TMD patients: a systematic review [J Oral Rehabil. 2014]

Review Temporomandibular disorder pain after whiplash trauma: a systematic review [J Orofac Pain. 2013]

Review Whiplash-associated disorders and temporomandibular symptoms [Quintessence Int. 2011]

The prevalence of temporomandibular disorders in patients with late whiplash [J Am Dent Assoc. 2013]

Review [The relationship between whiplash injury and temporomandibular joint dysfunction] [Harefuah. 2013]

See reviews...

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Related information

MedGen

Search to be mentioned

- ❖ Ref. # 13. Systematic Review (according PRISMA guidelines)
- ❖ Clark J, Nijs J, Yeowell G, Goodwin PC. What are the predictors of altered central pain modulation chronic musculoskeletal pain populations? Pain Physician 2017; 20: 487-500.
- ❖ Premorbid and acute stage high sensory sensitivity and/or somatization are the strongest predictors of altered central pain modulation in chronic musculoskeletal pain to date. Early identification of people at risk of developing chronic pain with altered central pain modulation may guide clinicians in appropriate management, diminishing the burden of persistent pain.

Search to be mentioned

- ❖ Ref. # 14. Descriptive Review.
- ❖ Monaco A, Cattaneo R, Marci MC, Pietropaoli D, Ortu E. Central Sensitization-Based Classification for Temporomandibular Disorders: A Pathogenetic Hypothesis. Pain Res Manag 2017, Epub 2017 Aug 28.
- ❖ Preliminary data on sensory, ultra low frequency transcutaneous electrical nerve stimulation (ULFTENS) show it is a reliable tool for the study of central and autonomic pathways in TMD. An alternative classification the DC/TMD based on the presence of Central Sensitization and on individual response to sensory ULFTENS is proposed.

Search to be mentioned

- ❖ Ref. # 59. Meta-analysis.
- ❖ Al-Morraissi EA, Wolford LM, Perez D, Laskin DM, Ellis E 3rd. Does Orthognathic Surgery Cause or Cure Temporomandibular Disorders? A Systematic Review and Meta-Analysis. J Oral Maxillofac Sure 2017; 75: 1835-47.
- ❖ Orthognathic surgery caused a decrease in TMD symptoms for many patients who had symptoms before surgery, but it created symptoms in a smaller group of patients who were asymptomatic before surgery.

Search to be mentioned

- ❖ Ref. # 185. Qualitative study.
- ❖ Fernandez Gonzalez FJ, Cabero Lopez J, et al. Efficacy of Selective Grinding Guided by an Occlusal Splint in Management of Myofascial Pain: A Prospective Clinical Trial. *Open Dent J* 2017; 11: 301-11.
- ❖ All facial types, specially the hyperdivergent face type, showed a reduction in condylar displacement (CD) and less craniomandibular symptoms using this procedure, making it an excellent technique for clinicians.

Search to be mentioned

- ❖ Ref. # 74. (Retrospective) Cohort study about DDwoR (closed lock)
- ❖ Yang JW, Huang YC, Wu SL, Ko SY, Tsai CC. Clinical efficacy of a centric relation occlusal splint and intra-articular liquid phase concentrated growth factor injection for the treatment of temporomandibular disorders. *Medicine Baltimore* 2017; 96: e6302.
- ❖ After CentricRelationOcclusalSplint treatment, except for the joint crepitus sound, which failed to achieve significant improvement ($P > 0.05$), other symptoms, such as DOM, TMD-associated headache, myofascial pain with referral, TMJ arthralgia, and MIO, all achieved statistically significant improvements ($P < 0.05$).

Search to be mentioned

- ❖ Ref. # 85. Systematic Review of Qualitative Studies.
- ❖ Caruso S, Storti E, Nota A, Esani S, Gatto R. Temporomandibular Joint Anatomy Assessed by CBCT Images. Biomed Res Int 2017; Epub 2017.
- ❖ The main topics treated in the studies are the volume and surface of the mandibular condyle, the bone changes on cortical surface, the facial asymmetry, and the optimum position of the condyle in the glenoid fossa. Additional studies will be necessary in the future, constructed with longitudinal methodology, especially in growing subjects.

Search to be mentioned

- ❖ Ref. # 94. Systematic Review of Qualitative Studies
- ❖ Donovan TE, Marzola R, Murphy KR, Cagna DR, Eichmiller F, McKee JR, Metz JE, Albouy JP. Annual review of selected scientific literature: Report of the committee on scientific investigation of the American Academy of Restorative Dentistry.
- ❖ Analysis of the scientific literature published in 2015 is divided into 7 sections, dental materials, periodontics, prosthodontics, occlusion and temporomandibular disorders, sleep-disordered breathing, cariology, and implant dentistry.

Search to be mentioned

- ❖ Ref. # 101. Randomized Controlled Trial. (though not indicated, it is free)
- ❖ Hernaez A, Castaner O, et al. Mediterranean Diet Improves High-Density Lipoprotein Function in High-Cardiovascular-Risk Individuals: A Randomized Controlled Trial. *Circulation* 2017; 135: 633-43.
- ❖ The mediterranean diet (TMD), especially when enriched with virgin olive oil, improved HDL atheroprotective functions in humans.

Search to be mentioned

- ❖ Ref. # 127. Systematic Review.
- ❖ Michiels S, Naessens S, et al. The Effect of Physical Therapy Treatment in Patients with Subjective Tinnitus: A Systematic Review.
- ❖ Despite the methodological issues in the included studies and the consequent low quality evidence, it is noteworthy that all included studies show positive treatment effects. Before recommendations can be made, these results need to be confirmed in larger, high quality studies, using unambiguous inclusion criteria, state-of-the-art treatment, and high quality outcome measures.

Search to be mentioned

- ❖ Ref. # 129. Systematic Review. (Cochrane Database Systematic Review)
- ❖ Weston P, Yaziz YA, Moles DR, Needleman I. **WITHDRAWN**: Occlusal interventions for periodontitis in adults.
- ❖ There is only **one randomised trial** that has addressed this question. The data from this study are inconclusive. We therefore conclude there is no evidence for or against the use of occlusal interventions in clinical practice. This question can only be addressed by adequately powered bias-protected randomised controlled trials.

Search to be mentioned

- ❖ Ref. # 169. Randomized Clinical Trial
- ❖ Omure H, Kanematsu-Hashimoto K, et al. Evaluation of a Proton Pump Inhibitor for Sleep Bruxism: A Randomized Clinical Trial. J Dent Res 2016; 95: 1479-86.
- ❖ Since the clinical application of a proton pump inhibitor (PPI) for sleep bruxism (SB) treatment should remain on hold at present, the results of this trial highlight the potential application of pharmacological gastroesophageal reflux disease treatment for SB patients.

Search to be mentioned

- ❖ Articles about T-scan. Occlusal adjustment new style.
- ❖ Ref. # 497, 907, 979, 998, 1019, 1042
- ❖ JPD: 979
- ❖ CRANIO: 497, 907, 998, 1019, 1042
- ❖ A breakthrough in occlusal adjustment: technic helps to make the work easier and more predictable (personal remark from your presenter).

Choice from SIC Members

- ❖ High quality articles: 56, 106, 117.
- ❖ All items: 406, 659, 770.

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OUR GOAL IS TO PROVIDE OUR MEMBERS AND FUTURE MEMBERS ADDED BENEFIT TO PASS ON OUR KNOWLEDGE TO OUR COLLEAGUES AND PATIENTS

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- ❖ NOW, ACCESS THIS INFORMATION, USE IT, AND SHARE IT
- ❖ THANK YOU FOR DONATING TO THE SCIENTIFIC INVESTIGATION COMMITTEE. WE WILL INVEST IT WISELY IN OUR FUTURE