



68th Annual Scientific Meeting

The Superb Clinician Redefined:
Incredible Successes & Incredible Failures



February 22nd – 24th, 2023 • Downtown Marriott Michigan Avenue • Chicago, IL

The AES
Scientific Investigation Committee

2022 Report
Michael Radu, DDS, MS

The SIC Committee



Michael Radu - Chair



Jette Holbrook



Warren Jeseke



Jack Marincel



Scott Allman

Our Goals

List and provide access to AES members' relevant publications

Fund requests for research in our related topics

Review last year's literature

Search strategy

((("Centric Relation"[Mesh] OR "Dental Occlusion"[Mesh] OR "Occlusal Adjustment"[Mesh] OR occlusion[tiab] OR "centric relation"[tiab] OR ((bite OR mouth OR night OR occlusal) AND (guard* OR splint OR device*))) OR ("Temporomandibular Joint Disorders"[Mesh] OR "Bruxism"[Mesh] OR "Tooth Wear"[Mesh] OR TMJ[tiab] OR (TMD[tiab] AND (dent*[tiab] OR tooth[tiab] OR teeth[tiab] OR jaw[tiab] OR molar*[tiab] OR bruxism[tiab])) OR "temporomandibular joint"[tiab] OR "temporomandibular joints"[tiab] OR "temporomandibular dysfunction"[tiab] OR "temporomandibular disfunction"[tiab] OR "temporomandibular dysfunctions"[tiab] OR "temporomandibular joint disorder"[tiab] OR "temporomandibular joint disorders"[tiab] OR bruxism[tiab])) OR (tinnitus[tiab] OR "orthognathic surgery"[tiab] OR airway[tiab] OR "sleep medicine"[tiab] OR "oral rehabilitation"[tiab] OR "implant restoration"[tiab] OR ((tooth[tiab] OR teeth[tiab] OR dental[tiab]) AND (abrasion[tiab] OR attrition[tiab] OR erosion[tiab] OR abfraction[tiab]))) OR (("osseous changes"[tiab] AND "TMJ condyle"[tiab]) OR "articular eminence"[tiab]) AND dent*

List of 1810 articles (252 pages)

[Body Dysmorphic Disorder \(BDD\) in the orthodontic and orthognathic setting: a systematic review.](#)

Dons F, Mulier D, Maleux O, Shaheen E, Politis C, J Stomato <https://pubmed.ncbi.nlm.nih.gov/34728407/> 30:S2468-7855(21)00239-1. doi: 10.1016/j.jormas.2021.10.015. Online ahead of print. PMID: 34728407

General prevalence of Body Dysmorphic Disorder (BDD), a psychiatric disorder in which patients focus on an imagined body defect not visible to others, varies between 0.7 and 2.5%. Up to 86% present with complaints in the area of teeth or face. Patients with B ...

□ 2

[Forehead region as an external reference point in orthognathic surgery.](#)

Chieng CY, Ilankovan V. Br J Oral Maxillofac Surg. 2021 Sep 20:S0266-4356(21)00344-2. doi: 10.1016/j.bjoms.2021.09.011. Online ahead of print. PMID: 34728105 No abstract available.

□ 3

[Anterior Nasal Spine Relocation With Cleft Orthognathic Surgery.](#)

Choi JW, Park H, Kwon SM, Koh KS. J Craniofac Surg. 2021 Nov-Dec 01:32(8):2812-2815. doi: 10.1097/SCS.00000000000008003. PMID: 34727483

METHODS: Patients with unilateral cleft lip who underwent two-jaw orthognathic surgery between July 2016 and July 2020 were reviewed retrospectively. During conventional two-jaw orthognathic surgery, the ANS was separated from the maxilla ...

□ 4

[Decreasing Inpatient Opioid Use Following Orthognathic Surgery.](#)

Phillips SJ, Peck CJ, Pourtaheri N, Reategui A, Carney M, Dinis J, Park KE, Maniskas S, Lopez J, Steinbacher DM. J Craniofac Surg. 2021 Nov-Dec 01:32(8):2808-2811. doi: 10.1097/SCS.00000000000008001. PMID: 34727482

We aimed to investigate the impact of perioperative various factors on inpatient opioid needs for patients undergoing orthognathic surgery. METHODS: This was a retrospective cohort study of all patients who underwent orthognathic surgery performed by t ...

□ 5

[A Concept of "Boundary Determination" by the Combination of a Local Flap and Free Tissue Transfer Useful for the Prevention of Postoperative Complications After Complex and Widespread Skull Base Reconstruction.](#)

Tanaka K, Sugawara T, Asakage T, Okazaki M. J Craniofac Surg. 2021 Nov-Dec 01:32(8):e820-e822. doi: 10.1097/SCS.00000000000007889. PMID: 34727459

There were no serious postoperative complications related to compression or occlusion of the cerebral parenchyma or paranasal sinus...

□ 6

[Evolution of Hematological Parameters in Patients Undergoing Orthognathic Surgery With a View to Hospital Discharge: A Prospective Study.](#)

Pereira VBS, Veras GAR, Rocha NS, Barbirato DDS, Neto JCDS, Vasconcelos BCDE. J Craniofac Surg. 2021 Nov-Dec 01:32(8):e787-e790. doi: 10.1097/SCS.00000000000007786. PMID: 34727456

BACKGROUND: The length of hospital stays of patients undergoing orthognathic surgery depends on related local and systemic factors. Hematological changes resulting from orthognathic surgery, followed up in the postoperative period until hospital ...

Review Sheet

SIC Literature Reviewer Score Sheet 2022

Number of the Article: Article#

Free? Y: , N: .

Special mention from podium? Y: , N: .

Proposed for "Important"? Y: , N: .

Name of reviewer: Radu

Dental discipline(s): Mark all that apply

Occlusion: , TMD: ,

Prosthodontics/Implants/Restorative: ,

Oral surgery: , Orthodontics: , Sleep medicine: ,

Other discipline(s) Other discipline(s)

Level of Evidence:

- I. **Systematic Review of RCT's**
- II. **RCT**
- III. **Controlled Trial Without Randomization**
- IV. **Case-Controlled /Cohort**
- V. **Systematic Review of Qualitative Studies or Descriptive**
- VI. **Qualitative or Descriptive Study**
- VII. **Opinion/Editorial/Case Report/Product**

Article supports occlusal therapy for TMD/OFP

Yes: , No: , N/A: .

Additional comments: Additional comments

“Each scientific field must adopt its own methods of ensuring accuracy. But ultimately, self-reflection is a key part of the scientific process”.

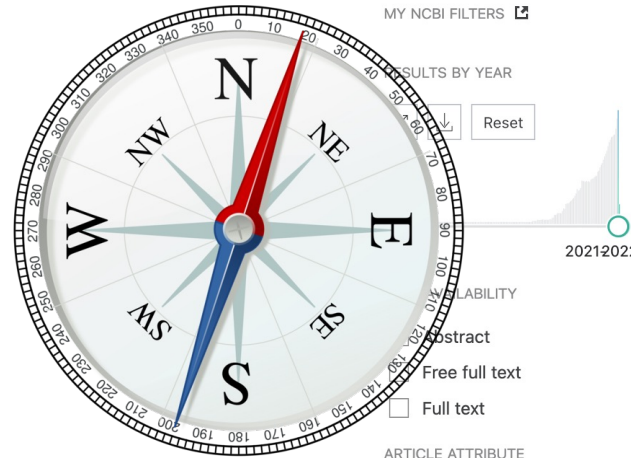
Ioannidis JP. **Why most published research findings are false.** PLoS Med. 2005 Aug;2(8):e124. doi: 10.1371/journal.pmed.0020124. Epub 2005 Aug 30. Erratum in: PLoS Med. 2022 Aug 25;19(8):e1004085. PMID: 16060722; PMCID: PMC1182327.

“In science, there's often not absolute certainty.
But **research reduces uncertainty**”.

<https://www.e-education.psu.edu/marcellus/node/790>

The Literature Review: Occlusion, TMD, Comprehensive Care

Published between 11/01/2021 - 10/30/2022



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PubMed.gov

occlusion

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10,835 results Page 1 of 1,084

Filters applied: in the last 1 year. Clear all

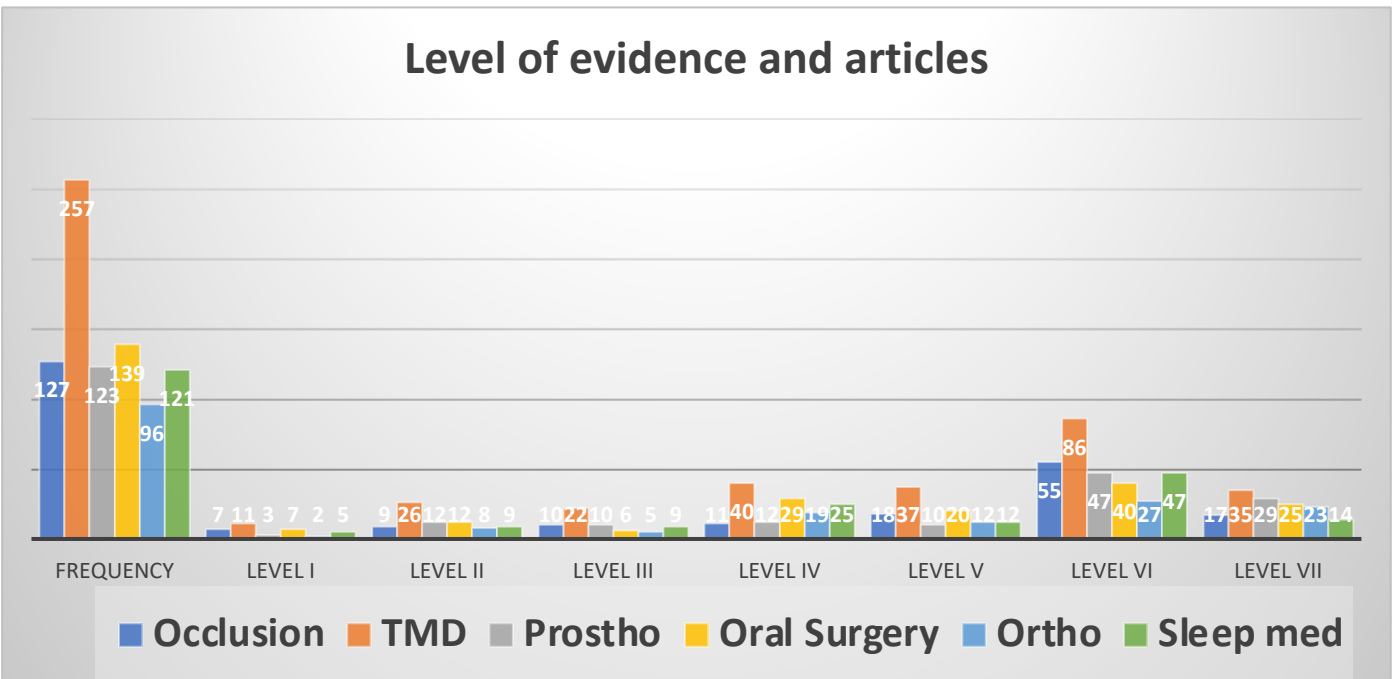
Complete Denture Occlusion: Best Evidence Consensus Statement.
1 Goldstein G, Kapadia Y, Campbell S.
Cite J Prosthodont. 2021 Apr;30(S1):72-77. doi: 10.1111/jopr.13309.
Share PMID: 33336857 Review.
MATERIALS AND METHODS: A literature search was limited to Meta-analyses, Systematic Reviews (SR), Randomized Controlled Studies (RCT) and Clinical Trials. Key Words were: Complete dentures, occlusion, harm; Complete dentures, occlusion alveolar bone loss; Complete d ...

Virtual occlusion in orthognathic surgery.
2 Baan F, van Meggelen EM, Verhulst AC, Bruggink R, Xi T, Maal TJJ.
Cite Int J Oral Maxillofac Surg. 2021 Sep;50(9):1219-1225. doi: 10.1016/j.ijom.2020.12.006. Epub 2020 Dec 25.
Share PMID: 33358521 Free article.
The criterion for accepting the virtual occlusion was that the difference between the gold standard and the virtual occlusion was not larger than the intra-observer variability for the gold standard. ...The virtual occlusion tool presented here can be utilize ...

Tabulation - Interactive

The screenshot shows an Excel spreadsheet with a complex table. The columns include: Article ID, Author, Journal, Year, Evidence-based Medicine criteria (e.g., Systematic Review, RCT, Occlusion), and a final column for 'Additional comments'. The data rows contain numerical values and text for each criterion across many articles.

Charts - Visuals



7. Nasal airway obstruction and orofacial pain: a multicenter retrospective analysis. Olmos SR. Gen Dent. 2022 Nov-Dec;70(6):28-33. PMID: 36288072

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The AES Scientific Investigation Committee is always looking for worthwhile

support. For further information please contact committee chair Dr. Michael Radu at [mradu@aes.com](#).

For a deeper

check out [THIS PAGE](#).

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

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- News
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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. Michael Radu at mradu@dentalart.com.

The AES Scientific Investigation Committee completes a Scientific Literature Review annually.
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The Literature Review

Search has yielded **1,810 articles** 11/01/2021 - 10/30/2022
- **604** considered *worthy of review* by our committee
members

Important articles (77):

1, 3, 5, 7, 17, 33, 43, 52, 57, 66, 67, 69, 70, 77,
84, 88, 96, 97, 100, 101, 113, 114, 115, 153, 154,
158, 159, 168, 170, 175, 188, 197, 202, 207,
215, 219, 227, 234, 247, 252, 261, 273, 279, 285,
287, 288, 295, 299, 301, 344, 372, 380, 382, 427,
506, 643, 645, 651, 658, 663, 675, 687, 700, 703,
712, 735, 757, 759, 789, 793, 797, 807, 809, 829,
834, 1051, 1503

Special mention/Important (29):

7, 43, 52, 67, 77, **84**, 88, 100, **101**, 115, 153, 158,
159, **188**, 219, 227, **234**, 252, 273, 288, 301, **372**,
427, 663, 735, 757, 793, **829**, **1503**

Showcased in the presentation - 9

Free articles - 237

1, 3, 5, 9, 18, 22, 27, 28, 34, 57, 59, 69, 70, 77, 96, 97, 110, 113, 114, 153, 154, 159, 165, 166, 168, 170, 182, 187, 200, 202, 209, 218, 227, 234, 242, 247, 250, 254, 270, 279, 283, 293, 295, 306, 310, 315, 326, 327, 331, 336, 337, 344, 353, 358, 360, 372, 376, 377, 383, 386, 387, 394, 401, 403, 404, 409, 418, 434, 437, 444, 446, 452, 453, 454, 457, 463, 465, 493, 497, 500, 504, 505, 506, 514, 523, 526, 534, 537, 538, 559, 561, 564, 571, 572, 590, 594, 604, 607, 616, 629, 651, 658, 663, 683, 687, 690, 712, 731, 735, 743, 747, 759, 793, 799, 818, 819, 832, 834, 881, 907, 908, 910, 911, 912, 914, 917, 928, 929, 930, 931, 934, 935, 945, 950, 953, 958, 961, 963, 965, 970, 974, 976, 977, 980, 984, 989, 991, 992, 999, 1004, 1008, 1010, 1017, 1019, 1022, 1025, 1028, 1029, 1030, 1038, 1039, 1048, 1051, 1052, 1057, 1058, 1060, 1061, 1062, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1081, 1087, 1097, 1098, 1111, 1121, 1122, 1131, 1135, 1136, 1137, 1139, 1141, 1145, 1146, 1155, 1158, 1159, 1162, 1165, 1166, 1167, 1173, 1174, 1183, 1186, 1187, 1188, 1189, 1196, 1197, 1198, 1200, 1201, 1203, 1207, 1214, 1223, 1225, 1238, 1239, 1241, 1264, 1315, 1495, 1522, 1525, 1529, 1531, 1534, 1563, 1576, 1579, 1592, 1601, 1612, 1613, 1627, 1724

[2022- AES Literature Review Search - All Search Comments](#)

The screenshot shows a detailed Excel spreadsheet with the following columns: Article ID, Free-Yes, Free-No, Special Note-Y, Special Note-N, Important-Yes, Important-No, Name of review, Occlus-TMD, Prosth/Imp/Restorative, Oral Surg, Orthod, Sleep Medici, Other discipline(s), I. Systematic Review of RCTs, III. Controlled Trial Without Randomizat, IV. Case-Controlled /Cohort study, V. Systematic Review of Qualitative/ Descripive Studies, VI. Quali or Descr Study, Article ID, Free-Yes, Free-No, Special Note-Y, Special Note-N, Important-Yes, Important-No, Name of review, Occlus-TMD, Prosth/Imp/Restorative, Oral Surg, Orthod, Sleep Medici, Other discipline(s), I. Systematic Review of RCTs, III. Controlled Trial Without Randomizat, IV. Case-Controlled /Cohort study, V. Systematic Review of Qualitative/ Descripive Studies, VI. Quali or Descr Study, VII. Opinion/ Editorial/ Case Report/FP, Article supports occlusal therapy for TMD/OP, Article supports occlusal therapy for TMD/OP, Article supports O, Additional comments.

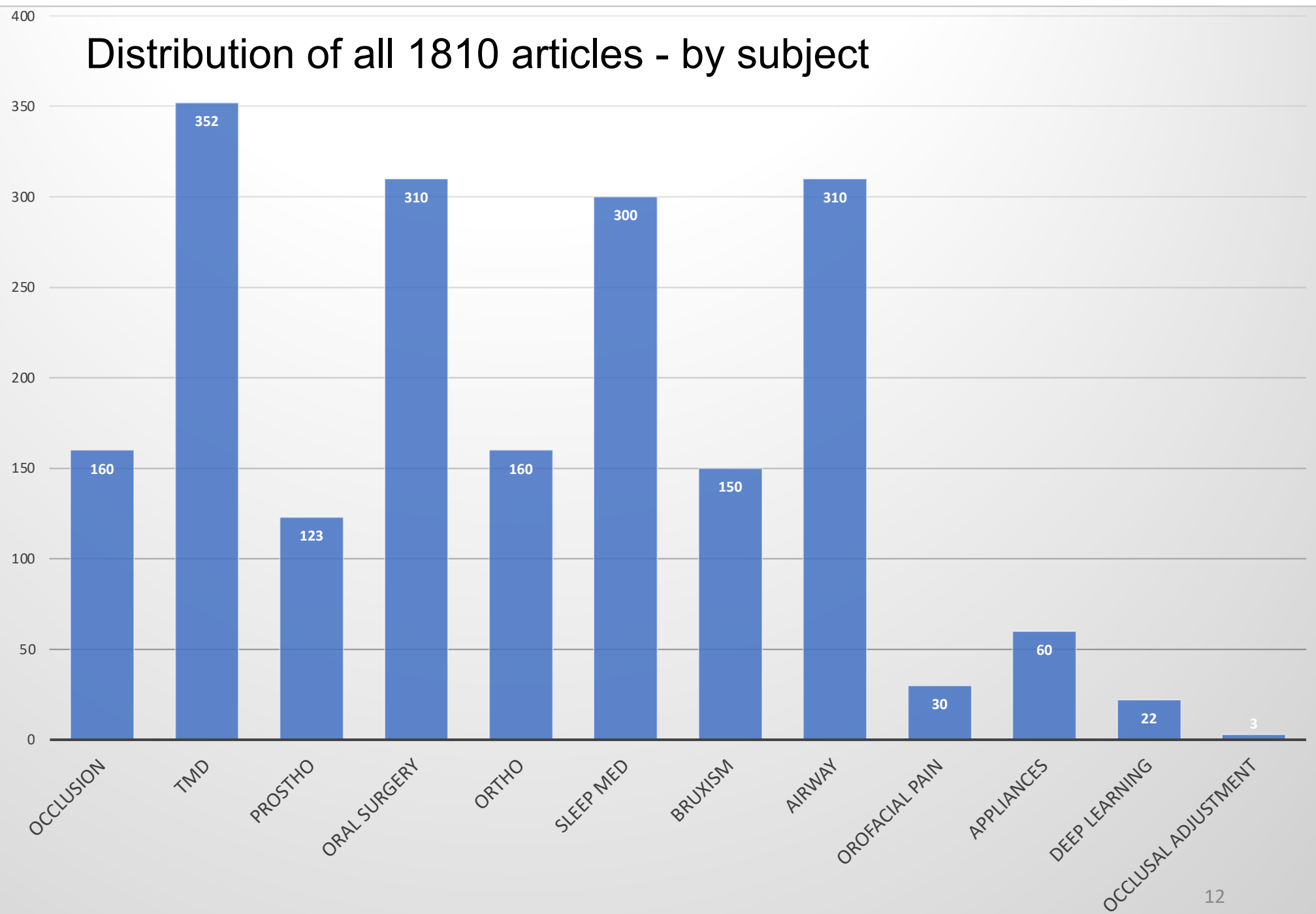
A filter menu is open, showing the following options: (Select All), TRUE (checked), FALSE. Two 'TRUE' values in the 'Occlus-TMD' column are circled in red.

On the AES website:

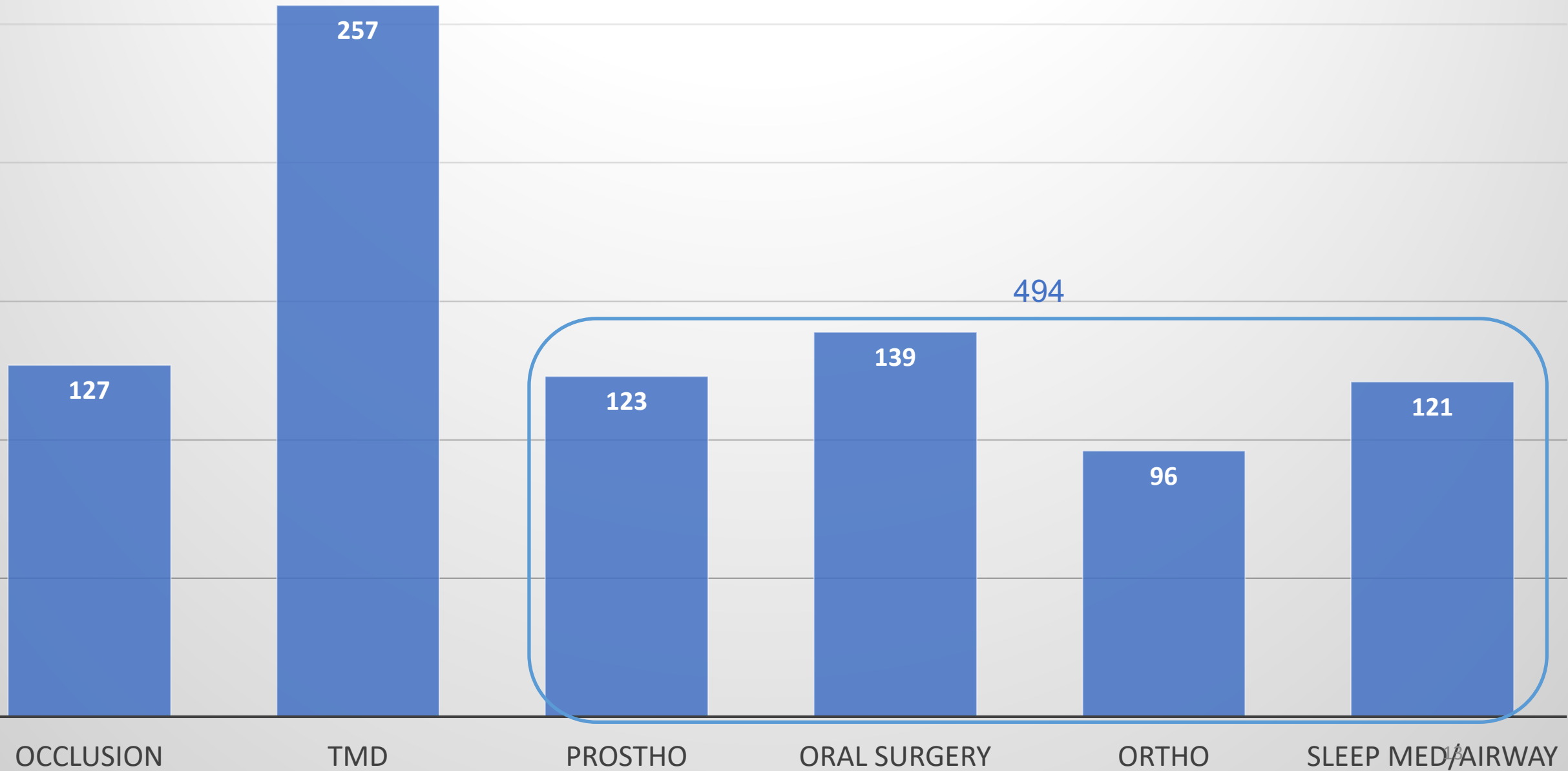
Complete list of 1,810 articles
 Tabulation spreadsheet
 This recording
 A Power Point of the recording

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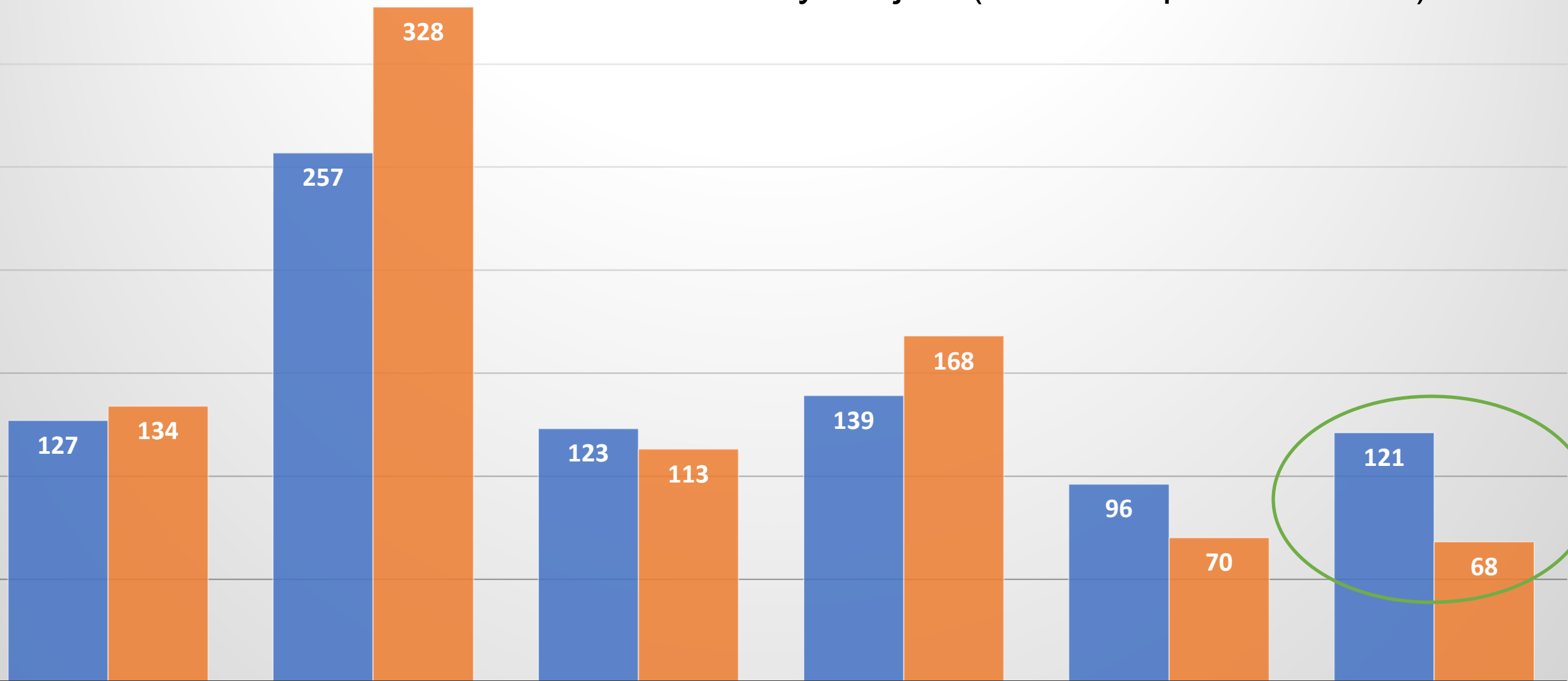
Distribution of all 1810 articles - by subject



Distribution of reviewed articles - by subject (2022)

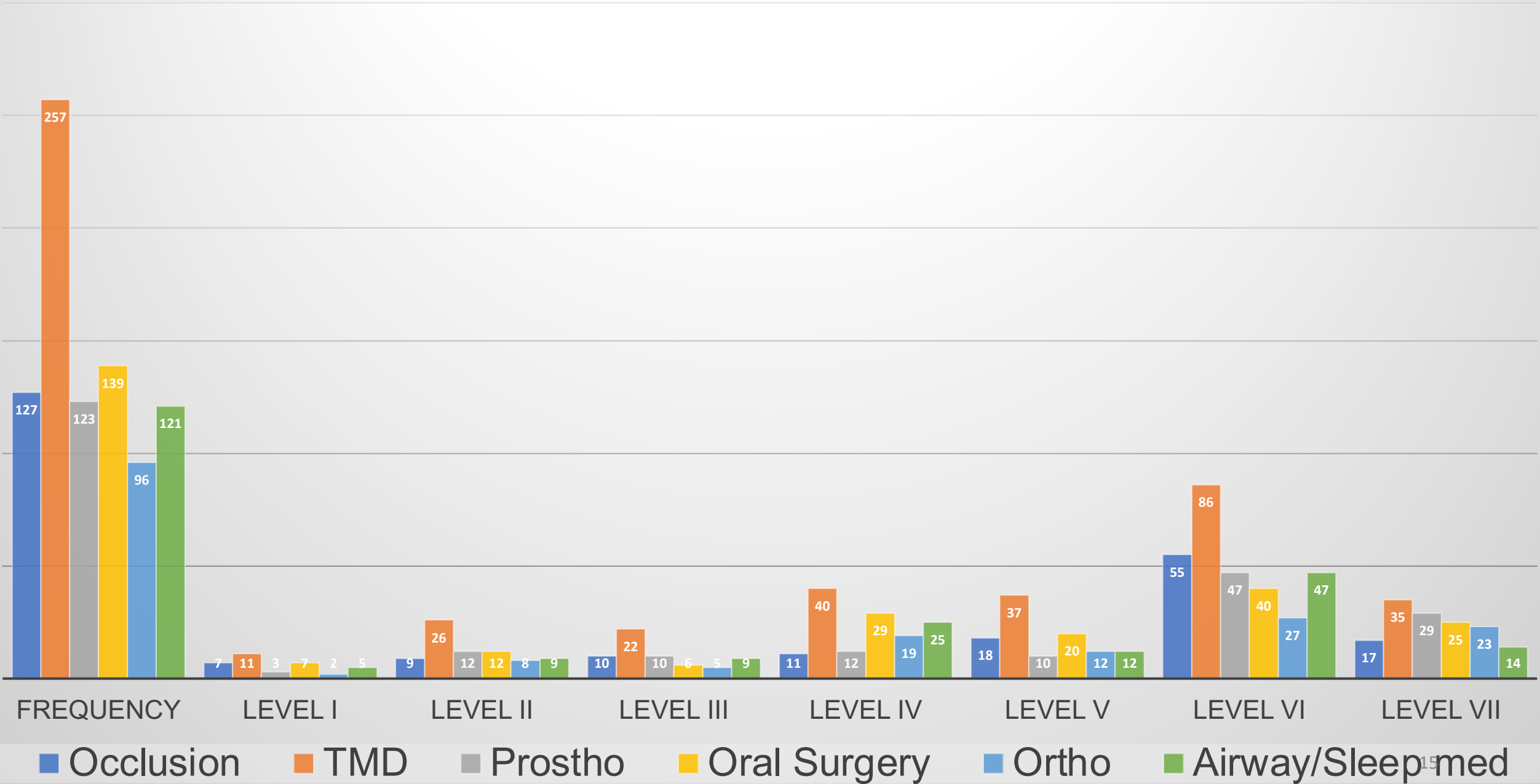


Distribution of reviewed articles - by subject (2021 compared to 2022)



■ 2021 ■ 2022

Distribution of articles and level of evidence

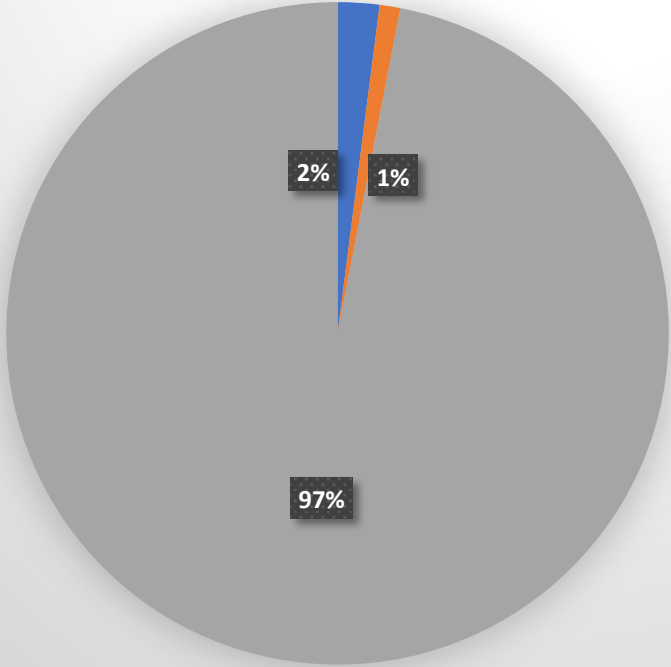


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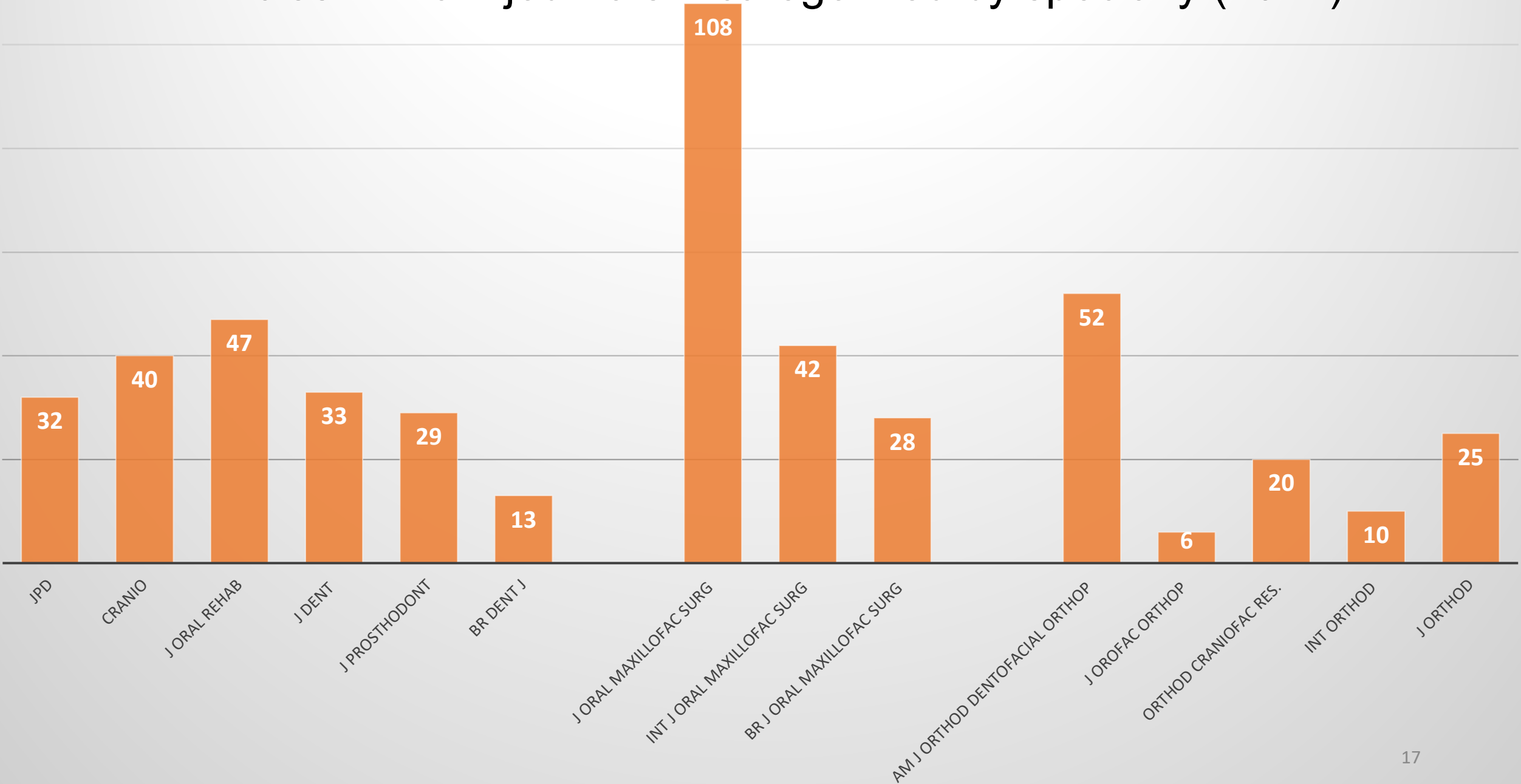
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Free Articles	Bold Articles	Important Articles	Occlusion	TMD	Prosth/Impl/Restorative	Oral Surgery	Ortho	Sleep Med	I. Systematic Review of RCTs	II. RCT	III. Controlled Trial Without Randomizat	IV. Case-Controll Cohort study	V. Systematic Review of Qualitativ	VI. Qualitative or Descriptive Study	VII. Opinion/Editorial/Case Report/Pro	Article supports occlusal therapy for TMD/OFP-	Article supports occlusal therapy for TMD/OFP-No	Article supports O therapy for TMD- N/A
2																			
3	24	22	13	13	14	41	14	34	28	51	13	24	14	22	28	34	13	22	14
4	29	28	14	28	22	43	26	56	29	201	43	117	26	29	41	76	28	51	24
5	43	29	22	29	24	70	56	70	32	426	119	217	32	69	43	81	34	81	26
6	49	39	26	34	26	236	68	71	49	463	124	218	39	77	67	110	51	132	29
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8	61	51	32	41	29	386	71	360	70	654	165	513	56	133	75	137	76	281	39
9	68	56	34	51	34	412	104	370	117	692	526	681	58	139	99	302	124	691	41
10	69	61	39	61	39	436	128	372	236	869	540	706	61	146	116	366	151	1021	43
11	70	63	41	67	43	440	136	416	387	870	580	712	63	206	131	369	201	1033	49
12	71	68	43	69	49	478	148	417	408	872	1008	727	68	276	151	372	607		58
13	77	69	49	70	51	485	156	421	428	875	1106	754	71	377	152	378	821		61
14	81	70	51	76	58	492	224	531	441	881	1129	758	78	382	176	392	833		63
15	83	71	56	81	63	497	236	664	465	943	1147	793	83	418	194	416	834		68
16	98	81	58	110	67	517	357	668	502	1033	1246	795	96	423	207	419	867		69
17	113	98	61	117	68	525	358	787	510	1043	1267	947	98	440	233	421	869		70
18	117	124	63	124	69	549	366	803	557	1202	1293	1444	113	471	357	432	1031		71
19	146	146	68	131	70	582	367	849	568	1216	1366	1989	148	548	358	447	1589		75
20	152	148	69	132	71	586	378	1027	573	1217	1411	1992	156	559	359	465	1888		77
21	156	156	70	133	75	636	381	1031	591	1229	1435		224	591	360	478	1961		78
22	194	217	71	137	76	649	414	1032	611	1270	1767		228	629	362	485	1962		83
23	201	218	77	139	83	652	416	1040	622	1301	1880		260	685	367	489	1964		96
24	218	224	78	151	96	654	419	1053	668	1312	1952		273	766	370	503			98
25	233	236	81	152	98	656	421	1067	672	1341	1973		274	821	374	506			99
26	236	535	83	176	99	754	423	1095	677	1342	1982		281	867	380	519			104

Articles Support for Occlusal Therapy



- Support
- Do not support
- Neither/Nor

Articles in main journals – categorized by specialty (2022)



The AES Scientific Investigation Committee

TOP 9 ARTICLES of 2022:

TMD – Airway - Level II - RCT

7

[Nasal airway obstruction and orofacial pain: a multicenter retrospective analysis.](#)

Olmos SR. Gen Dent. 2022 Nov-Dec;70(6):28-33. PMID: 36288072

Objectives: to investigate the relationship between nasal airway obstruction (NAO) and symptoms of orofacial pain, including temporomandibular joint pathology and primary headaches

Conclusions:

- This study was a retrospective analysis of consecutive patients seeking care for chronic orofacial pain at 14 North American treatment centers
- The study population consisted of 1393 patients, 253 men (18.2%) and 1140 women (81.8%)
- Nasal Valve Compromise showed a statistically significant comorbidity with capsulitis (odds ratio, 3.73) as well as facial and cervical myositis (odds ratio, 6.97)
- these comorbidities have been identified. NAO had a high comorbidity with orofacial pain
- This will help the clinician to evaluate the role a patient's nose may be playing in orofacial pain

TMD - Orthodontics - Airway – Level IV - Case control cohort study

372

[Orthodontic interventions as a management option for children with residual obstructive sleep apnea: a cohort study protocol.](#)

Fagundes NCF, Perez-Garcia A, Graf D, Flores-Mir C, Heo G. *BMJ Open*. 2022 Jun 15;12(6):e061651. doi: 10.1136/bmjopen-2022-061651. PMID: 35705345 Free PMC article.

Objective: to create a protocol for a prospective cohort study that aims to assess the effectiveness of orthodontic interventions for managing residual pediatric OSA in patients with concomitant craniofacial issues

Conclusions:

- A sample size of 70 participants (n=35 per cohort) is planned
- Effectiveness data will be assessed through nocturnal polysomnography, a craniofacial index, sleep questionnaires and medical records
- The findings will be shared with scientific and patient content-specific social network communities

TMD - Imaging – Digital Level VII – Opinion, editorial

101

[Dynamic 3D images fusion of the temporomandibular joints: A novel technique.](#)

Zhang L, Shen L, Zhang L, Zhang C, Wang H. J Dent. 2022 Nov;126:104286. doi: 10.1016/j.jdent.2022.104286. Epub 2022 Sep 10. PMID: 36096297

Objectives: To demonstrate a procedure for fusing images from cone-beam computed tomography (CBCT), magnetic resonance imaging (MRI) and optical positioning tracking system to dynamically evaluate the relative motion of the temporomandibular joint (TMJ)

Conclusions:

- anatomical structures of the articular fossa, articular disc, and condyle were clearly displayed in the CBCT-MRI fused images
- this method can visually display mandibular motion trajectories and the relative TMJ positions
- virtual reproduction provides a comprehensive understanding of the articular disc's morphology and position in different states from a 3D perspective

TMD - Level I - Systematic review of RCT

188

[Psychological therapies for temporomandibular disorders \(TMDs\).](#)

Penlington C, Bowes C, Taylor G, Otemade AA, Waterhouse P, Durham J, Ohrbach R. Cochrane Database Syst Rev. 2022 Aug 11;8(8):CD013515. doi: 10.1002/14651858.CD013515.pub2. PMID: 35951347 Review.

Objectives: To assess the effects of psychological therapies in people (aged 12 years and over) with painful TMD lasting 3 months

Conclusions:

- 22 RCTs (2001 participants), carried out between 1967 and 2021
- 12 of these studies in meta-analyses were included
- the certainty of the evidence to be low or very low for all comparisons and outcomes
- data were insufficient to draw any reliable conclusions about psychological therapies other than CBT
- overall, we found insufficient evidence on which to base a reliable judgement about the efficacy of psychological therapies for painful TMD
- further research is needed to determine whether or not psychological therapies are effective

TMD - Level VI - Opinion, descriptive study

234

[Advice for Dentists from Temporomandibular Disorder Patients: A Phenomenological Study.](#)

Safour W, Hovey R. J Can Dent Assoc. 2022 Mar;88:m4. PMID: 35881060 Free article.

Objectives: what TMD patients want their dentists to know and do

Conclusions:

- TMD participants consistently stressed the need for their dentists to listen and provide them with more advice and information to cope with TMD conditions
- The implications of this study will be to decrease medical crises and expensive interventions, provide better assistance to patients and refer them to other necessary health care professionals
- This will lead to lower care costs, more satisfaction and higher quality of life

TMD - Level I - Systematic review of RCT

829

[Efficacy of rehabilitation on reducing pain in muscle-related temporomandibular disorders: A systematic review and meta-analysis of randomized controlled trials.](#)

Ferrillo M, Ammendolia A, Paduano S, Calafiore D, Marotta N, Migliario M, Fortunato L, Giudice A, Michelotti A, de Sire A. J Back Musculoskelet Rehabil. 2022;35(5):921-936. doi: 10.3233/BMR-210236. PMID: 35213347 Review.

Objective: to assess the efficacy of rehabilitative approaches in reducing pain in patients with muscle-related TMD

Conclusions:

- Out of 1997 papers 16 RCTs were included and most of them (n= 6, 37.5%) investigated the effects of the laser therapy
- rehabilitative approaches might be effective in reducing pain in muscle-related TMD patients
- the low number of RCTs evaluating conservative approaches might impair the synthesis of evidence
- this calls for caution in the interpretation of these results

Occlusion – TMD – Oro-facial pain – Level I - Systematic review of RCT

1,503

[Occlusal disharmony and chronic oro-facial pain: from clinical observation to animal study.](#)

Cao Y. J Oral Rehabil. 2022 Feb;49(2):116-124. doi: 10.1111/joor.13236. Epub 2021 Aug 14. PMID: 34333797 Review.

Objective: to present a narrative literature on occlusal disharmony and chronic oro-facial pain – a 70 year lit search

Conclusions:

- clinical cases revealed an intimate association between occlusal disharmony and chronic oro-facial pain
- patients suffered from psychological distress, sleep disturbance and poor life quality
- occlusal disharmony-related oro-facial pain is a clinical problem that deserves attention
- there are no universally accepted clinical protocols
- existing literature provides some constructive suggestions, but further research is needed

Occlusion - Restorative - Digital Level VII – Opinion, editorial

84

[Control of occlusal rehabilitation with 3D-printed crowns.](#)

Höhne C, Schmitter M. Int J Comput Dent. 2022 Sep 20;25(3):325-332. doi: 10.3290/j.ijcd.b3380909. PMID: 36125805

Objective: 3D-printing technology was used to control and adjust the occlusal rehabilitation with 3D-printed crowns

Conclusions:

- dentistry is experiencing a great shift toward new and interesting production solutions with 3D-printing technologies
- technologies give dentists the ability to create more predictable and cost-effective treatments
- 3D printing is already being used to create temporary and definitive dental crowns as well as complex treatments

Occlusion – Prosthodontics - Level I - Systematic review of RCT

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[Influence of T-scan System on Occlusion Correction of Implant Supported Protheses: A Systematic Review.](#)

Aradya A, Nagarajagowda RSK, Basavaraju RM, Srinivas S, Kumararama SS. J Contemp Dent Pract. 2022 Jan 1;23(1):105-117. PMID: 35656667

Objective: To systematically evaluate the literature evidence regarding the suitability of the T-scan **occlusal** system for **implant** supported protheses

Conclusions:

- This review consisted of 17 studies and 359 patients rehabilitated with 1,126 implants
- T-scan proved with better results than other occlusal analysis indicators in terms of occlusion measurement, clinical execution, quantify the location and contact timing, and occlusion in 3D with more precision
- T-scan has an increase in the number of studies, so a systematic review evaluating and comparing results is warranted

The Literature Review - Summary

A discussion of the most important research in 2022

- Trends – Airway; TMD; Digital
- Occlusion studies – less than in prior years
- TMD – Oral Surgery - Appliances
- Several very interesting studies – see the list
- The tabulation - additional resources to use
- Please peruse the resources from the AES website as research tools

