

largely affiliated with institutions in China (50%), the UK (20%) and Italy (20%). One hundred and forty-five publications were by authors affiliated with institutions in a single country; 91 percent of publications from APAC and 44 percent from Europe, indicating different patterns of collaboration within these regions. In terms of reporting methodologies, 39 percent of included publications did not specify whether a frequentist or Bayesian framework was used (43% in APAC, 34% in Europe). Among those that reported, the Bayesian framework was more commonly used.

Conclusions: Whilst there is a growing trend in NMA publication counts generally, the rate of increase in APAC was higher than Europe, particularly in the years following adoption of health technology assessment (HTA) procedures in APAC. The volume of publications not reporting the framework used was substantial, despite requirements for this in reporting guidelines e.g., PRISMA. Where reported, the Bayesian framework may have been favored due to its advocacy by some health technology assessment bodies.

PP80 The Value of Intraoperative Neural Monitoring During Thyroid Surgery In China: A Literature Review

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Introduction: Recurrent laryngeal nerve (RLN) injury has been a frequent source of malpractice litigation following thyroid surgery. Intraoperative neural monitoring (IONM) has been widely applied to avoid RLN injury in thyroid surgery in developed countries, but China cannot achieve the same application rate currently. To improve the recognition and application of IONM in China, this literature review aims to synthesize the evidence on the value of IONM in China.

Methods: A comprehensive literature review was conducted by searching through PubMed, CNKI and Wan Fang to identify studies about the IONM technology for protecting RLN during thyroid surgery in Chinese clinical data.

Results: Nineteen Chinese clinical trials of IONM during thyroid surgery published from 2012 to 2022 were included for review. Almost all studies recruited adults who need thyroid surgery and only one study enrolled geriatric patients. There were three (3/19) prospective studies and two were randomized controlled trials that both showed that IONM helped surgeons to detect the RLN with less time and reduce the injury of RLN in reoperative thyroid surgery. Major studies (16/19) conducted retrospective analysis and six of them (6/16) only had an IONM group that showed that IONM technology can avoid damage to the RLN. The remaining ten studies (10/16) compared patients with and without IONM during the surgery. Compared with the non-IONM group, nine studies (9/10) stated IONM technology has an advantage in the reduction of RLN injury rate and seven studies (7/10) claimed IONM was helpful in reducing the time of surgery. One study believed IONM was beneficial to reducing bleeding during the

surgery and another study reported a lower incidence of hypoparathyroidism with the IONM group.

Conclusions: The value of IONM for protecting RLN during thyroid surgery and improving operation efficiency has been thoroughly proven by the above Chinese clinical trials. Further economic evaluations and patient-reported outcomes research of IONM with Chinese hospital data will help better assess the value of IONM.

PP81 Efficacy Of Transcranial Direct Current Stimulation For Depressive Episode Disorders

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Introduction: Depression is a general term that describes different depressive disorders which are highly prevalent and disabling, characterized by decreases in quality of life. Transcranial Direct Current Stimulation (tDCS) is a non-invasive brain modulation technique used, among other purposes, for the treatment of chronic pain and headache. In order to clarify the effect of this stimulation on depressive disorders, the objective of this review was to evaluate efficacy and safety of treatment with tDCS for depressive disorders.

Methods: A systematic research study was carried out on 30 June 2022 in MEDLINE (by Pubmed), Embase, Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), PsycInfo e Global Mental Health databases. Were included systematic reviews (SR) with meta-analysis that selected patients with depression, in use of tDCS, using as comparator sham stimulation (placebo) or any other treatment (pharmacologic or no) or any comparison between pre-and post-intervention.

Results: Eight SR with meta-analysis of randomized clinical trials (RCTs) on the efficacy and safety of tDCS in the treatment of depressive disorders were retrieved. Subjects were assessed for clinical response, remission, change in scores on depression scales, occurrence of procedure-related adverse events, and treatment dropout. Three systematic reviews showed results that point to the effectiveness of tDCS for the clinical response outcome and one considering the remission outcome. As for the outcome measured by the change in depression scale scores, all included reviews showed favorable results for tDCS. It is noteworthy that the studies included in the reviews have methodological limitations. With regard to safety,

an increased risk treatment-emergent mania or hypomania (TEM) has been observed.

Conclusions: The tDCS association with antidepressants showed favorable results to this technology in a sample with depression and varied clinical characteristics. Regarding safety of this technology, tDCS did not show adverse effects of greater severity, but was verified to have an increased risk of TEM.

PP82 Comparison Between Informal Caregiver Burden Of Patients With Alzheimer's Disease Versus Other Chronic Diseases

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Introduction: Alzheimer's disease (AD) is a neurodegenerative disease with progressive neuropsychiatric symptoms. Patient care is often provided by informal caregivers similarly to various other chronic diseases. This targeted literature review assessed the difference in burden experienced by caregivers of people with AD in comparison to other chronic diseases.

Methods: Two separate search strings were developed to identify (i) caregiver burden in AD and (ii) caregiver burden in other chronic diseases using PubMed. Studies published in English (January 2012–October 2022) were included. Comparison of the caregiver burden was done using the weighted mean values (MV) of several questionnaires including the Zarit Burden Interview (ZBI), a 22-item self-report questionnaire for caregivers ranging from 0 to 88 points. ZBI is stratified into four categories of caregiving burden: Little or no burden (0 to 21), mild to moderate burden (22 to 40), moderate to severe burden (41 to 60) and severe burden (61 to 88).

Results: ZBI was the most frequently used questionnaire; 13 studies reported data on caregiver burden in AD and 39 studies reported data on 20 other chronic diseases. The caregiver burden ranged from 18 to 48 in AD, measured by ZBI. The MV of AD burden was 36 based on a total of 1,703 participants. The caregiver burden in other chronic diseases ranged from MV of 5 (chronic musculoskeletal pain) to 59 (bipolar disorder).

Measured by ZBI, AD burden on caregivers (MV: 36, range: 18–48) was greater than heart failure (MV: 27, range: 16–29) and type 2 diabetes (MV: 26, range: Not reported) but lesser than schizophrenia (MV: 56, range: 52–65) and bipolar disorder (MV: 59, range: Not reported).

Conclusions: AD has a significant burden on caregivers. When assessing the value of interventions targeting AD, the impact of AD on caregivers should be considered in addition to the impact of AD on patients. Further studies are required to assess the informal care burden in AD and other chronic diseases.

PP84 Evaluation Of The Evidence Level Of Scrambler Therapy For Musculoskeletal Pain Relief: A Systematic Literature Review

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Introduction: Non-invasive Scrambler Therapy (ST) reduces pain by attaching electrodes to neural pathways of major nerves, transmitting information along with microcurrent to the nerves to induce a painless sensation. The ST has been widely used to reduce pain for patients with musculoskeletal pain. However, little is known about the musculoskeletal pain relief effect of the ST. Therefore, this study aims to evaluate the treatment effectiveness of the ST.

Methods: A systematic literature review was conducted based on the following search strategy and databases, and all studies published before August 2021 were included in Pubmed, Embase, and Cochrane library, Ovid Medline, Koreamed, kmbase, and Science On. The subjects were patients with intractable and musculoskeletal pain, excluding cancer pain, and intervention methods included non-invasive ST alone or in combination with physical therapy. In addition, the comparative method was not limited. The outcome variables were the degree of pain relief, total analgesic use, health-related quality of life, pressure pain threshold, pain intensity and functional interference scales, and pain sensitivity. Safety-related outcome variables were all side effects. Cochrane Risk of Bias 1.0 was used to assess the risk of bias in the literature.

Results: Two hundred forty-one articles were retrieved using a pre-determined search strategy. Of these, 15 duplicate articles, 215 articles after reviewing the abstract and title, and nine articles after checking the full text were excluded. Two studies with randomized controlled trials (RCTs) were finally selected. When comparing ST and placebo groups for musculoskeletal pain, the pain reduction effect of ST lasted for three weeks. Moreover, patients with neuropathic pain treated with ST had a lower pain intensity for one to three months compared to the drug treatment group.

Conclusions: Based on this systematic review, the effectiveness of ST is yet sufficient owing to small sample size and possibility of selective report bias. More studies with well-designed RCTs are required to further assess the effectiveness of the ST.

PP86 Systematic Review Toolbox 2.0: Rebuilding Toolbox With A Novel Taxonomy To Classify And Share Evidence Synthesis Tools

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