EPV0424

Role of Omega 3 Fatty Acid as an Adjunct Treatment to Depression in Different Age Groups of the Patient Population - A Current Literature Review

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Introduction: Depression is a widespread problem that affects individuals of all ages. This study looks at the use of omega-3 polyunsaturated fatty acids (PUFAs) as an additional therapy for depression in people of different ages. Depression has an impact on everyone, from youth to the elderly, causing therapeutic concerns such as treatment resistance and recurrence. Omega-3 PUFAs, which may be found in fish and flaxseed, are important because of their impact on neurochemistry, inflammation, and neuroprotection. While pharmacotherapy, including antidepressants, has proven beneficial for many, the likelihood of remission and recurrence remains substantial. In recent years, there has been a growing interest in the potential role of omega-3 polyunsaturated fatty acids (n-3 PUFAs) in mitigating depressive symptoms. The primary constituents of n-3 PUFAs are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Understanding the potential of omega-3 PUFAs across the lifespan can help address the multifaceted challenges posed by depression and improve mental health outcomes for diverse age groups.
Objectives: This review aims to assess the role of omega-3 fatty acids in depression treatment across different age groups: children and adolescents, adults (18–60), and the elderly (60+). It investigates the effectiveness and potential differences in omega-3 supplementation among these age cohorts.
Methods: A comprehensive literature search was conducted from 2003 to 2023 using PubMed, Google Scholar, and EMBASE, using specific keywords. Studies with inadequate age group information or Omega-3 intervention were excluded.
Results: In children and adolescents, several studies indicate a positive association between omega-3 supplementation and improved depressive symptoms. In adults, results are mixed, with some studies showing benefits while others do not. In the elderly, omega-3 PUFAs appear to have a more consistent positive effect on depression. In contrast, a consistent positive association was observed in the geriatric population, suggesting that Omega-3 PUFAs may hold particular promise in the treatment of depression among older adults. However, variations in methodology, dosage, and study populations contribute to these mixed findings.
Conclusions: Omega-3 PUFAs show promise as an adjunct therapy for depression across different age groups. Further research with standardized methodologies and larger sample sizes is needed to clarify their role and establish optimal dosage guidelines. Omega-3 PUFAs should be considered as a potential complement to conventional depression treatments, emphasizing the need for personalized approaches in depression management.

Disclosure of Interest: None Declared

EPV0425

Clinical Benefits, efficacy and tolerability of slowly titrated vortioxetine oral drops solution

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Introduction: Vortioxetine is mainly prescribed as oral tablets, usually starting at 5-10 mg per day, and is well tolerated by most patients. However, some patients may experience side effects, the most common of which is nausea, which occurs in 20.9-31.2% of people treated with doses of 5-20 mg/day (Baldwin et al, J Psychopharmacol. 2016;30:242-52). In some countries, vortioxetine is also available as an oral solution (1 drop = 1 mg), which allows a very slow titration schedule that may improve tolerability.
Objectives: To evaluate whether vortioxetine oral drop solution, started with 1-2 drops (1-2 mg per day) and increased by 1-2 drops per day to 10-20 drops (10-20 mg), is associated with better tolerability and a lower risk of nausea than that observed with oral tablets started with 5-10 mg per day, while maintaining efficacy. To provide pilot data for the design of a multicentre, prospective study.
Methods: Retrospective, single-centre, observational study. Participants were 58 consecutive patients (mean age 45 + 17 years, 55.2% female) treated with vortioxetine for a depressive episode. Vortioxetine was initiated and titrated up to 1 drop (1 mg) per day in 58.6% of subjects, and initiated and titrated up to 2 drops in 41.4% of subjects. Tolerability was assessed at all visits. CGI and MADRAS scores were recorded at the following time points: T0-baseline, T1=week 1, T2=week 2, T3=week 4, T4=week 8). Comparisons were made using repeated measures ANOVA with Bonferroni correction.
Results: Nausea was reported by 8 subjects (13.8%) at T1, 4 subjects (6.9%) at T2, 1 subject at T3 (1.7%) and none at T4. Other adverse reactions (mainly dizziness, pruritus/itching, vomiting, diarrhoea, and xerostomia) were reported by a total of 6 subjects (10.3%) at T1, none at T2 and T3, and 1 subject (1.7%) at T4. The maximum dose administered was 20 mg in 75.9% of patients. No patients discontinued vortioxetine due to adverse events, but vortioxetine was discontinued prior to T4 (8 weeks of treatment) in 2 subjects due to lack of efficacy. The mean CGI at baseline was 4.3 ±0.8. The mean value decreased to 3.9±0.7 at week 1 and to 3.4±0.6, 2.7±0.6, 1.9 ±0.5 at weeks 2, 4 and 8, respectively. All differences were statistically significant ($p<0.001$) compared to baseline. Also from week 2, all scores were statistically significant compared to all previous assessments. The total MADRS score decreased from 28.3±4.6 at baseline to 24.9±4.2, 20.9±4, 16.3±3.6 and 10.9±3 at weeks 2, 4 and 8, respectively. A significant decrease in MADRS total score was observed at each time point ($p<0.001$) compared to baseline and previous assessments.

Conclusions: Slow titration with vortioxetine oral drop solution was associated with a very low percentage of patients reporting side effects in general, and nausea in particular, and with a relatively rapid improvement in depressive symptoms.

Disclosure of Interest: None Declared

EPP0646

Unipolar and Bipolar Depressed Inpatients: correlations with Vitamin D and Cognitive Symptoms

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Introduction: Cognitive symptoms are the main factor of discomfort in depressed patients, persisting even during clinical remission (Conradi et al. Psychol Med 2011;41:1165-74) and inevitably compromising their quality of life (Fehnel et al. CNS Spectr 2013;25:1-10). Several studies have suggested the neuroprotective role of vitamin D, both through actions on the genome and rapid non-genomic mechanisms; so, low serum vitamin D levels are related to poorer cognitive performance (Goodwill et al. JAGS 2017;2:1-8), depressive disorders (Kjærgaard et al. Psyc Res 2011;190:221-225) and suicide risk (Umhau et al. PLoS One 2013;8:e51543).
Objectives: to investigate relationships between serum vitamin D levels, depressive symptoms and cognitive performance in unipolar and bipolar depressed adults hospitalized for Major Depressive Episode (MDE).
Methods: 80 patients (34 M and 46 F; average age 48,96 ±14,17 years; 40% with bipolar depression) were examined. Depression was investigated using Hamilton Rating Scale for Depression (HAM-D), while cognitive functions were explored by: Rey Auditory Verbal Learning Test (RAVLT) and Rey-Osterrieth Complex Figure (ROCF) to assess verbal and visuospatial memory, respectively; Trail Making Test (TMT) and Stroop Color and Word Test to assess attention, spatial planning and cognitive flexibility. Venous blood sampling was used to determine serum Vitamin D levels (average level 15,67 ± 8,7 ng/ml).
Results: At first, the serum level of vitamin D was found to be inversely correlated with HAM-D scores (p=0,0079), so that lower concentrations of vitamin D is related to greater severity of depression. In addiction, there were strongly significative positive correlations between low vitamin D levels and poorer RAVLT and ROCF scores and strongly significative negative correlations between vitamin serum level and higher scores in TMT and STROOP test, so that calcidiol deficit is associated with poor cognitive performance. Similarly, patients with higher HAM-D scores were found to have a greater cognitive impairment (lower RAVLT e ROCF scores and higher TMT e STROOP scores).
Conclusions: In accordance with previous works, our study supports the close relationship between serum vitamin D levels and depressive morbidity. During MDE hypovitaminosis D is related to worse disease indices, such as severity of affective symptoms and cognitive impairment, without substantial differences between clinical manifestations of unipolar and bipolar depression, both in terms of affective and cognitive symptoms and disease severity. Considering that cognitive deficits are truly disabling because they may resist to common antidepressant treatments and, as a result, persist during stages of clinical remission, vitamin d supplementation, by minimizing cognitive dysfunction, could be a good strategy to reduce the risk of relapses and to improve patients' functioning and quality of life.

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E-mental Health

EPV0427

Evaluation of User Satisfaction in a Supportive Text Message Program for Public Safety Personnel

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Introduction: Public safety personnel (PSP) encounter traumatic events in their workplace, elevating the likelihood of mental health issues. Delivering efficient, evidence-backed interventions, like supportive SMS text messaging programs, can significantly enhance PSPs' mental well-being, garnering high user satisfaction rates.
Objectives: This study evaluates users' satisfaction, receptiveness, and perceptions of the supportive SMS text messaging intervention (Text4PTSI).
Methods: Participants enrolled in the Text4PTSI program and received one-way cognitive behavioural–based supportive text messages for six months. They participated in a web-based survey delivered through SMS text messages at enrollment, six weeks, three months, and six months after enrollment. The participants' perceptions and receptiveness of the program were evaluated through a 5-point Likert scale. Data were represented as categorical variables, and overall satisfaction with the Text4PTSI program was assessed on a scale ranging from 0 to 100.
Results: Of the 131 Text4PTSI program subscribers, 81 participants responded to the survey, yielding 100 responses across the three follow-up time points. The average satisfaction score was 85.12 (SD 13.35). A significant portion of respondents, constituting 79%, agreed or strongly agreed that Text4PTSI helped them manage anxiety. Additionally, 72% reported relief from depressive symptoms, and 54% (54 out of 100 responses) felt less lonely. Moreover, the majority (84%) of participants expressed that Text4PTSI connected them to a support system, improving their mental well-being, felt more hopeful about managing concerns about their mental health or substance use (82%), and helped enhance their overall quality of life (77%). The data also revealed that most participants consistently read the supportive text messages (84 out of 100 responses, 84%), took time to