

The effect of propolis plus *Hyoscyamus niger* L. methanolic extract on clinical symptoms in patients with acute respiratory syndrome suspected to COVID-19: A clinical trial

The outbreak of Coronavirus disease 2019 (COVID-19) has caused a global health crisis. Nevertheless, no antiviral treatment has yet been proven effective for treating COVID-19 and symptomatic supportive cares have been the most common treatment. Therefore, the present study was designed to evaluate the effects of propolis and *Hyoscyamus niger* L. extract in patients with COVID-19. This randomized clinical trial was conducted on 50 cases referred to Akhavan and Sepehri Clinics, Kashan university of medical sciences, Iran. Subjects were divided into two groups (intervention and placebo). This syrup (containing 1.6 mg of methanolic extract along with 450 mg of propolis per 10 mL) was administered three times a day to each patient for 6 days. The clinical symptoms of COVID-19 such as: dry cough, shortness of breath, sore throat, chest pain, fever, dizziness, headache, abdominal pain, and diarrhea were reduced with propolis plus *Hyoscyamus niger* L. extract than the placebo group. However, the administration of syrup was not effective in the control of nausea and vomiting. In conclusion, syrup containing propolis and *Hyoscyamus niger* L. extract had beneficial effects in ameliorating the signs and symptoms of COVID-19 disease, in comparison with placebo groups.

Combination effect of Methylphenidate and Risperidone in treatment of children with attention-deficit hyperactivity disorder

Attention-deficit hyperactivity disorder (ADHD) is the most common psychiatric disorder in children. Due to the high prevalence of the disorder and its psychological consequences and the lack of response to treatment in 20-30% of children to Ritalin, the present study aimed to evaluate the effect of Risperidone with Ritalin in the treatment of children with ADHD.

In this clinical trial study, 60 children aged 6 to 12 years with ADHD were randomly divided into Ritalin+placebo and Ritalin+Risperidone. The dose of Ritalin was started at 0.5 mg/kg daily and increased to a maximum of 1 mg/kg. The dose of Risperidone was started at 0.25 mg daily and given up to a maximum of 1 mg daily. The severity of hyperactivity with attention deficit was assessed using the ADHD rating scale questionnaire at baseline and weeks 2, 3, 4 and 6 after drug administration. The collected data were analyzed by SPSS software version 26 using mixed ANOVA. The results showed that the two groups had a significant improvement in terms of ADHD rating scale during 6 weeks of treatment ($P < 0.001$) but there was no significant difference between the two groups ($P > 0.05$). Risperidone and Ritalin can be effective in treating children with ADHD and are well tolerated. Also, adding Risperidone to Ritalin can prevent side effects such as insomnia and anorexia and may require a lower dose of Ritalin to control symptoms

Clinical and Metabolic Reaction to Probiotic Supplement in Children Suffering Attention-Deficit Hyperactivity Disorder: Randomized, Double-Blind Placebo-Controlled Experiment.

This paper aimed at assessing the influence that probiotic supplement had on mental health and metabolic conditions of children suffering attention-deficit hyperactivity disorder (ADHD). **Materials and Methods:** A number of 34 children with ADHD were selected randomly. Participants were randomly allocated into a group receiving 8×10^9 CFU/g probiotic supplements ($n = 17$) and a group receiving placebo ($n = 17$) during an 8-week time period. Clinical symptoms were recorded applying the rating scale of ADHD (ADHD-RS), Children's Depression Inventory (CDI), and Hamilton Anxiety Rating Scale (HAM-A) both at onset of the study and after the 8-week interval. Moreover, samples of blood were also taken at the beginning and after the 8-week interval so that the metabolic information could be evaluated. **Results:** The probiotic supplementation could bring about a considerable decrease in total ADHD-RS ($\beta -3.31$; 95% confidence interval [CI]: $-5.60, -1.02$; $P = 0.006$) and HAM-A ($\beta -1.91$ [0.18]; 95% CI, $-3.41, -0.41$; $P = 0.01$) than that of the placebo. In addition, probiotic supplementation brought about a considerable decrease in high sensitivity C-reactive protein (hs-CRP) of serum ($\beta -2.05$ mg/L; 95% CI, $-3.57, -0.52$; $P = 0.01$) as well as a substantial rise in plasma overall antioxidant volume (TAC) (\hat{a} 66.26 mmol/L; 95% CI, 36.83, 95.68; $P < 0.001$) than that of the placebo. No meaningful effects were observed on CDI and other metabolic features after the intake of probiotic supplements. **Conclusions:** Taking probiotic by children suffering ADHD could affect ADHD-RS, HAM-A, hs-CRP of serum, and TAC levels in plasma, while it did not show any effects on CDI and other metabolic profiles.