Anti-inflammatory effect of Linum usitassimum (Flaxseed/linseed) fixed oil on inflammatory bowel disease in mice
Yanat Betitra
University of Bejaia, Algeria

Abstract
Currently, there are several therapeutic options for inflammatory bowel disease (IBD). However, they may have possible adverse effects or even relatively significant efficacy. The fixed oil of flaxseed (Linum usitassimum) is known for its high content of omega 3 fatty acids and proteins acting as stimulators of the immune system. Thus, the main objective of this study was to study the anti-inflammatory activity of the fixed oil of flaxseed on a mouse model and its effect on the gut microbiota.

The anti-inflammatory effect of the fixed oil was tested with doses of 50 and 100 mg/kg on acetic acid-induced colitis on an animal model (albino mice) for 48 hours. In parallel, a bacteriological analysis of the faecal flora of each lot (healthy, sick and treated by fixed oil) was carried out by the enumeration of Escherichia coli on selective medium.

Statistical tests revealed that the administration of Linum usitassimum fixed oil significantly (P <0.05) decreased the P / L (weight/ Length of the colon) ratio with a 15.1% reduction, as well as, a decrease in hemorrhagic erosions scattered throughout the colon compared to colitic lot and an improvement in colon length. In addition, a decrease in the number of E. coli in fecal matter was also observed. All these results suggest an anti-inflammatory effect of the fixed oil. Thereby, flaxseed fixed oil has an anti-inflammatory effect and can therefore be considered as a potential therapeutic strategy in the treatment of inflammatory bowel disease (IBD).

Speaker Publications:
1. Anti-inflammatory effect of Linum usitassimum (Flaxseed/linseed) fixed oil on inflammatory bowel disease in mice

Abstract Citation:
Yanat Betitra, Anti-inflammatory effect of Linum usitassimum (Flaxseed/linseed) fixed oil on inflammatory bowel disease in mice, Pharmaceutical Microbiology 2020, 18th International Conference on Pharmaceutical Microbiology and Biotechnology; Webinar - September 28-29, 2020

Biography:
Betitera Yanat has is a teacher-researcher in microbiology and has completed her PhD in 2017 at Bejaia University regarding antimicrobial resistance, infectious diseases, and antimicrobial activities of natural products. He is a member of diseaseare antimicrobial resistance, infectious diseases, and antimicrobial activities of natural products. He is a member of