

Conclusions. Further in vivo studies are required to investigate *Spirulina platensis* fractions potential toxic effects. In particular researches are needed to evaluate the use of control-release formulations in order to maintain the *Arthrospira platensis* pigments concentrations at antibacterial active doses.

Key words: Antibacterial resistance, reducing pathogens, *Spirulina platensis*, organic antimicrobials

324. INTERFERONS. UTILIZATION IN ANTIVIRAL THERAPY

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Introduction. IFNs are a class of soluble glycoproteins with a strong antiviral activity, classified into three types: Type I (IFN- α/β), II (IFN- γ) and III (IFN- λ). Because of the clinical failures using only antiviral medications and the generation of drug-resistant strains, IFN treatment became a good option because it targets the host's immune response and not the specific viral proteins.

Aim of the study. Study and analysis of existing data in the literature on antiviral activities of IFN and their use in antiviral therapy in human diseases.

Materials and methods. The presentation represents a literature review based on previously completed research into the role of IFN in the treatment of viral diseases.

Results. Because of their ability to modulate immune responses, IFNs have become attractive therapeutic options in controlling chronic viral infections. Type I IFNs were part of standard treatment for VHC and VHB infections and no IFN-resistant viral subpopulations were observed. In addition, there is an increased interest in testing the antiviral efficacy of type III IFN in HCV infection, based on the fact that the type III IFN receptor is more restricted in its expression and is present on the hepatocytes. IFN- γ combined with highly active antiretroviral therapy (HAART) dramatically reduced morbidity and mortality associated with HIV, being used successfully in treating opportunistic infections associated with HIV.

Conclusions. Although they are effective, IFNs need to be used with caution, because they are powerful cytokines that affect a wide range of cells; as a result, patients usually had side effects and a part of them had systemic effects.

Key words: Interferons, type I IFN, type II IFN, type III IFN, antiviral therapy.

325. HELICOBACTER PYLORI INFECTION. DIAGNOSTICS METHODS

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Introduction. More than half of the adult global population are carriers of *H.pylori*, a Gram-negative microaerobic human pathogen, which is associated with various gastroduodenal diseases. Diagnostic tests are divided into noninvasive (UBT, SAT, serology) and invasive