RESEARCH SAPROPEL'S PROPERTY OF THE PRIBICH

Strus O.E., Konovalenko I.S., Polovko N.P.

The National University of Pharmacy, Kharkiv, Ukraine

Danylo Halytsky Lviv National Medical University, Lviv, Ukraine

Sapropel – organic sludges, sediments of fresh continental pond. There are three main components: water (60-75%), sol part(sand, clay, carbonates, phosphates, silica, iron compounds, etc.), organic component which has non-uniform structure and are very complexly. Sapropel refers to natural and renewable resources and it is a unique organic raw material. Sapropel uniqueness compared to other therapeutic mud that means that only sapropel goes full cycle of biosynthesis.

Sapropel can not be decomposed and has no odor, and in vivo has regenerative properties that can clean itself. Has a wide range of applications, which includes many diseases of various systems and organs. Experimentally proved that the local application for action is not inferior to traditional methods, have no contraindications, do not cause allergic reactions and complications.

Analysis of published data on the pharmacological activity of sapropel showed the presence of anti-inflammatory, antioxidant, regenerating, the antimicrobial activity of sapropel.

A lot of researches have shown the ability to leverage sapropel in medicine (medicine, pharmacology, mud therapy and cosmetology). Found that the sapropel treatment improves lymph- and blood circulation, strengthens the vascular wall, stimulated function of the autonomic nervous system. Sapropel in enteral application has a strong antioxidant and healing pharmacology action. Enterosorbent sapropel is effective and can be recommended for use in the complex therapy of acute and chronic poisoning.

The purpose of our research was to study the antimicrobial activity of sapropel which is situated in village of Pribich (Shatsky district, Volyn region). Investigations were carried out at the Institute of Mechnikov Microbiology and Immunology institute. The antimicrobial activity was studied by the test organisms Staphylococcus aureus strains ATCC 25923, Escherichia coli ATCC 25922, Pseudomonas aeruginosa ATCC 27853, Basillus subtilis ATCC 6633, Proteus vulgaris ATCC 4636, Candida albicans ATCC 885/653. Results of the study indicate the presence of a minor antibacterial activity investigated sapropel all the reference test cultures (except for Staphylococcus aureus).

Wide range of indications for using sapropels clearly shows importance of using for treatment and deseas prevention.