

PHARMACOLOGICAL STUDY OF SORBUS AUCUPARIA LEAVES EXTRACT

Kononenko A.V., Drogovoz S.M.

National University of Pharmacy, Kharkiv, Ukraine

Emilia41618@yandex.ua

Due to the fact that recently, according to pharmacologists, many modern drugs do not conform to the requirements of safety, that's why attention of professionals attracted to drugs based on herbal substances. Phytomedication in opposite to synthetic one cause fewer complications, almost non allergic, so they can be use for a long time, especially for rehabilitation patients. Biologically active compounds that are presence in plants give a different pharmacological action make it possible to used phytomedication in treatment of many diseases. An example is a drug based on leaves of *Sorbus aucuparia*.

The aim of the work was experimentally proved the feasibility of using *Sorbus aucuparia* leaves extract (SALE), developed at the Department of Pharmacognosy NUPh under O. Kryvoruchko for the treatment of inflammatory joint disease.

Was found (on models of karahenin and zymozan edemas) that the anti-exudative activity of SALE is equal to comparison drug quercetin. Also was defined conventionally-effective dose of SALE, which was 100 mg/kg and used in further studies.

On the model of necrotic ulcers in rats SALE showed distinct anti-alterative effect (delay formation of wounds and reducing their size). By reparative action SALE exceeded activity of diclofenac sodium and quercetin. By antiproliferative effect SALE inferior to indomethacin and diclofenac sodium.

SALE had mild analgesic (23.3%) and antipyretic (29.4%) activity that is in 2 times inferior to diclofenac sodium and analgesic activity at the same level as quercetin.

On the model of adjuvant arthritis SALE slightly (by 8.7%) yielded to diclofenac sodium action in their ability to reduce the edema of the rats' limbs. However, SALE prevailed comparison drug to the effect on WBC on 36% and had made a positive impact on biochemical parameters which exceeded diclofenac sodium ALT activity (10%), content of TP (22%), the level of TBA (37%) and the level of GR (54%).

These results suggest that SALE is a perspective substances to create drugs with anti-inflammatory and anti-arthritic action.