Formulation and Evaluation of Two Anti-inflammatory Herbal Gels

Miriam Fouad Yousif

Professor

Abstract

Two herbal gels expected to produce a topical anti-inflammatory activity were formulated,
characterized and evaluated both phytochemically and biologically. The selected active ingredients were two
tannin extracts (Q and G) obtained from Acacia nilotica Del. fruits (Qarad) and Quercus infectoria Oliv. galls
(Oak gall). The total polyphenol content of the powdered drugs was estimated colorimetrically. The aqueous
methanol (50 %) extracts of the investigated samples were individually incorporated, at different concentrations
(0.5 - 2 mg/ml), into polyvinyl alcohol (PVA) hydrogels. Gallic acid was used as marker for HPLC standardization
of the extracts and determination of drug content in the hydrogels. The anti-inflammatory activity was assessed
by measuring the inhibitory effect of the extracts and hydrogels on xylene-induced ear edema in mice.

JBAPN - 2011, January