A241 Formulation of an herbal antiperspirant from *Hamamelis persica* and preliminary clinical study

M. Azadbakht, J. Akbari and S. Pasandi
Mazandaran University of Medical Sciences, Faculty of Pharmacy, P.C: 48175-861, Sari, Iran.

Hamamelis persica is indigenous in North province of Iran (1). Other species, *Hamamelis virginiana* is grown in North of America and has a little distribution in Europe (2).
Many investigation were performed on the *H. virginiana* and species but there is no study about *H. persica* and this is the first report regarding to clinical and phytochemical study of the plant. *H. persica* leaves were collected in May, August and October of 1999 from Mazandaran. Extraction was accomplished from the leaves through percolation by ethanol 70°.
Tannins were measured by spectrophotometric method. For the clinical study as antiperspirant, a roll-on preparation was formulated on the extract, by using of glycerol, propilen glycol, ethanol, water, carbapol 934P, antioxidant and preservative. The dry extract was used in amount of 5% in the preparation. The formulation was prepared in a suitable viscosity. Product stability was evaluated during 5 month.
Then product and placebo were given to volunteers. The preliminary clinical study was performed in a blind study with preparing questionnaire (3).
The results showed that the leaves contains, mainly pyrogallol group tannins (6.11%).
Product had suitable stability in clinical study. Sweat (perspiration) quantity was redused in 85 percent of the volunteers that used the product for armpit.

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A242 Effect of *Cotoneaster discolor* manna on infant jaundice (effect on blood bilirubin)

M. Azadbakht [a], *N. Pishva* [b], *S. Mohammadi* [c] *and F. Alinejad*
[a] Mazandaran University of Medical Science, Faculty of Pharmacy, Sari, Iran, [b] Shiraz University of Medical Sciences, Faculty of medicine, Shiraz, Iran. [c] Shiraz University of Medical Sciences Faculty of Pharmacy, P.C.: 48175-861, Sari, Iran.

Jaundice is observed during the first week of life in approximately 60% of term infants and 80% of preterm infant (1). The risk of hyperbilirubinemia is due to the development of kernicterus (bilirubin encephalopathy), hearing loss, spasticity and convulsion at high serum bilirubin levels (2) phototerapy is recommended for the treatment of neonatal jaundice and if it is unsuccessful exchange transfusion can be used to keep the maximum total serum bilirubin below risk levels of CNS injury (3). Manna obtained from *Cotoneaster discolor* Pojark (purgative manna) is commonly being used in the treatment of neonatal jaundice in iranian traditional medicine. It is also the purpose of this article to design the formulation of drop with certain doses, therefore purgative manna with browse of *C. discolor* were prepared from South of Khorassan. Drop was prepared from total extract of this manna and named bilineaster, then the quantitative and qualititive controls and microbial tests were accomplished and then it was administered to newborn with jaundice.
100 babies (case group) received bilineaster drop with phototherapy, and 100 others (control group) were also given placebo drop with phototherapy (dosage: 5 droplets, TID).
The time required to reduce the serum bilirubin level to 10 mg/dl was significantly two days shorter than control group, therefore, bilineaster drop in addition to phototherapy was recommended in treatment of neonatal hyperbilirubinemia.

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