〈シンポジウム〉

グリチルリチン 一甘草由来成分の特性とその応用—

池田孝夫

Glycyrrhizin

- The Character of Glycyrrhizae Radix's Contents and it's Application -

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Abstract

Glycyrrhizae Radix (G.R.) has been used as a medicament in Europe and the Orient from B.C.; the material has been used by itself or with other crude drugs mainly as a mild antidote. Glycyrrhizin (G.) is the chief component.

Effects of G. include detoxication, ulcer restoration, anti-inflammation and anti-allergy. Glycyrrhetinic acid (G.A.) produced by hydrolysis of G.R. is an anti-inflammatory agent; several derivatives of the acid have been developed. Stearyl Glycyrrhetinate and Glycyrrhetinyl Stearate were shown to be the most effective in the rat foot and cotton pellet tests. These two derivatives had a lower LD50 in the acute toxicity test than G.A. Topical application of G.A. in PEG ointment to experimental carrageenin edema and UV erythema in guinea pigs were recognized as very effective; the topical anti-inflammatory action of G.A. was shown to be dose-dependent.

In human patch tests, additional Dipotassium Glycyrrhizinate or Disodium 3-Succinyloxy Glycyrrhetinate in the cold permanent wave 1st lotion reduced the severity of the skin reaction caused by that irritant lotion.

Keywords: Glycyrrhizin, Glycyrrhetinic acid, Stearyl Glycyrrhetinate, Glycyrrhetinyl Stearate, Disodium 3-Succinyloxy Glycyrrhetinate.