FORMULATION OF PILIS *POSTPARTUM* HERBAL EXTRACT GEL AND ANALGESIC EFFECT TEST ON MICE

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ABSTRACT

Pain that occurs in postpartum women if not properly maintained can have a negative impact on morbidity and mortality of postpartum women who can interfere with their activities in caring for the baby. Pilis is a herbal mixture of various plants that is usually used as a compress by postpartum mothers and is believed to reduce headaches. The analgesic effect of this herbal medicine has never been studied scientifically. Therefore, this study was conducted to make a gel preparation and see the analgesic effect of pilis herbal extract. The pilis preparation was developed into a gel dosage form because the gel has clear and transparent properties so that it is comfortable to use and does not interfere with appearance. This research is an experimental research by making extracts from pilis herbal medicine using 70% ethanol solvent and maceration method. The gel was made into 5 formulas with extract concentrations of 0% (F0), 1% (F1), 3% (F2), and 5% (F3). Evaluation of the physical quality of the gel preparation included organoleptic test, homogeneity test, pH test, spreadability test, and viscosity test. Analgesic effectiveness test of pilis herbal extract gel was evaluated by hotplate method. Data analysis used one way ANOVA with SPSS 16.0 statistical program and 95% significance level. The results showed that the organoleptic test results of pilis herbal extract gel preparations were in the form of a thick to slightly thick texture, a distinctive herbal aroma, and a brownish yellow color. All formulas are homogeneous; pH 5.47-7.03; spreadability 6.21-6.65; viscosity 3519.4-9287.3 cPs. Postpartum pilis herbal extract gel has analgesic effect on mice (p<0.05). The formula with the best analgesic effect is formula 3 which has an analgesic percentage of 64.76% (p<0.05).

Keywords: Analgesik, gel, pilis herbal, analgesic, female mice.

