

ABSTRACT
(LITERATURE REVIEW)

**IDENTIFICATION OF DEXAMETHASONE
IN POWDER POWDER
THIN LAYER CHROMATHOGRAPHY**

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One of the herbs that are widely consumed by the community is the herbal medicine for aches and pains. Aches and pains are pain caused by fatigue. Aches and pains usually attack the joint areas such as the neck, back, arms, legs, shoulders which are usually caused by stiffness in the muscles to certain medical problems. The public's great interest in herbal products is often misused by herbal medicine manufacturers who allow adding BKO (Medicinal Chemicals).

One type of BKO added by manufacturers to herbal medicine is dexamethasone, a corticosteroid class drug. Dexamethasone if consumed in excess has anti-allergic, anti-asthmatic, corticosteroid and dexamethasone effects in herbal medicine can cause moon face, fluid and electrolyte retention, hyperglycemia, glaucoma, growth disorders, osteoporosis, decreased resistance to infection, myopathy, gastric disorders, hormonal disorders and etc.

Based on the above background, the researchers are interested in conducting a literature review on the identification of dexamethasone compounds in herbal pain relief powders using the Thin Layer Chromatography method. Samples were taken from herbal medicine shops in the form of samples of herbal aches and pains with different brands. As the mobile phase, chloroform: methanol (9:1); dichlorethane:diethyl ether:methanol:aquadest (77:15:8:1,2); chloroform: acetone (4:1) and silica gel TLC plate GF254 as stationary phase.

The results showed that the Rf of dexamethasone using the mobile phase above was 0,875; 0,31 and 0,31 and Rf samples using the above mobile phase, respectively (A = 0,42; C = 0,42; E = 0,20; F = 0,20 and H = 0,73); (A1 = 0,76; A2 = 0,74; B1 = 0,74; B2 = 0,74; C1 = 0,77 and C2 = 0,77) and (C = 0,85; E = 0,21; G = 0,37 and I = 0,38). The results of this study concluded that there was no dexamethasone content in the samples of herbal pain relief in the reviewed journals.

It is necessary to conduct further research on the content of dexamethasone in herbal pain relief using the densitometry method.

Keywords : *Deksametasone, herbal medicine for aches and pains, Thin Layer Chromatography*