PREPARASI SENYAWA 4-METOKSIBENZOIL SALISILAMIDA DAN UJI
AKTIVITAS ANALGESIK PADA MENCIT (Mus musculus)

DONNIE ANDREAS
Dr. Bambang Tri Purwanto, Apt, MS.
KKB KK2 FF 376 11 And p

ABSTRACT

To develop the new drug of NSAID group, preparation of 4-methoxybenzoyl salicylamide had been done by reaction of salicylamide and 4-methoxybenzoyl chloride, based on Schotten-Baumann method. The yield percentage from the preparation of 4-methoxybenzoyl salicylamide was 65 % and its melting point was 183-187°C. The compound was identified by using the spectrophotometric data of infra-red, ultra-violet and also the 1H-nuclear magnetic resonance spectrophotometric.

The analgesic activity was tested using the writhing test method. The result showed that in dose of 25 mg/kg mice body weight, the pain inhibition percentage was 64.08%, in dose of 50 mg/kg mice body weight, the pain inhibition percentage was 81.22%, in dose of 100 mg/kg mice body weight, the pain inhibition percentage was 91.17%, with the ED50 was around 11.463 mg/Kg mice body weight. However the standard compound salicylamide shown in dose of 25 mg/kg mice body weight, the pain inhibition percentage was 16.58%, in dose of 50 mg/kg mice body weight, the pain inhibition percentage was 39.71%, in dose of 100 mg/kg mice body weight, the pain inhibition percentage was 56.36%, with the ED50 was around 77.165 mg/Kg mice body weight. The result from the analgesic activity test for this new compound shows that this new compound has better analgesic activity than salicylamide.

Keywords : preparation, 4-methoxybenzoyl salicylamide, writhing test, analgesic activity.