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## **ANALGESIC EFFECT OF PIPER BETLE LINN. VOLANTILE OIL IN MUS MUSCULUS STRAIN BALB/C MICE**

### Hypothesis / aims of study

This study is aimed to prove a significant less in the number of writhing movement in Mus musculus strain BLAB/C mice in acetic – acid induced writhing test when treated with Piper betle Linn. volatile oil per oral.

### Study design, materials and methods

This study is kind of experimental with the post test only control group design. Thirty mice were divided into five group including on negative control group, one positive control group, and three treatment group. The treatment group were received three different which is 60,26 mg per kg body weight, 120,51 mg per kg body weight, and 241,02 mg per kg body weight Piper betle Linn. volatile oil per oral. The negative control group were received CMC-Na 5% while the positive control group were received acetosal (190 mg per kg body weight), both orally. The result of this test were writhing movement in acetic – acid induced mice. These data were analyzed with non parametric Wilcoxon test with  $\alpha = 0,05$ .

### Results

The non parametric Wilcoxon test indicate a significant less in the number of writhing movement in mice when treated orally with 120,51 mg per kg body weight, and 241,02 mg per kg body weight of Piper betle Linn. volatile oil, as compared with the CMC – Na treated group ( $p < 0,05$ ).

### Interpretation of results

These result indicate the analgesic effect of Piper betle Linn. volatile oil with the dose of 120,51 and 241,02 mg per kg body weight.

### Concluding message

Some study still to be conducted to prove the analgetic substances from Piper betle Linn. volatile oil and to find out an effective dose of Piper betle Linn. volatile oil which has the same effect with standard analgetics.

### Disclosures

**Funding:** Udayana University **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** ANIMAL **Species:** Mice **Ethics Committee:** Udayana University