

## ABSTRAK

**Background:** Parker ink blue black potassium hydroxide (KOH) is a regular stain for the diagnosis of dermatophytosis. KOH giving less color contrast to the dermatophytes element. The Chicago Sky Blue-KOH (CSB) solution is a new contrast have various sensitivity and specificity values.

**Purpose:** This study is to determine the diagnostic value of Chicago Sky Blue (CSB) stain in diagnosing dermatophytoses compared to KOH 20% + ink Parker™ blue black.

**Methods:** This is cross sectional study conducted at Dermatmycology Division of Outpatient Clinic, Dr. Soetomo General Hospital Surabaya. 40 samples cases diagnosed dermatophytosis with culture positive using sabourauds dextrose agar were used for the growth of dermatophytes and incubated at 37<sup>0</sup> C for 4 weeks are include in this study. All two tests were performed examined by KOH and CSB according to standard procedure. The slides were examined after 5 minute incubation in x 10 and x 40 magnifications. The sensitivity, specificity and McNemar test of CSB and KOH was calculated using culture as the standard test.

**Results:** The sensitivities, specificities, PPV, NPV of the Chicago sky blue and KOH respectively are 95% dan 100%, 95,24% dan 100%, 100% dan 100%, with McNemar test  $p = 1$  and Kappa score is 0,950.

**Conclusions:** The Chicago Sky Blue stain provides a good color contrast and it could be a alternative staining for the dermatophytoses.

**Key words:** Chicago sky blue, KOH, parker ink blue black, dermatophytoses, culture