Antiangiogenic Activity Test of Sambiloto (Andrographis paniculata) Leaves Ethanolic Extract on The Chick Embryo Chorioallantoic Membrane

Melyta Permata Sari

ABSTRACT

The aim of this study was to find out antiangiogenic activity of sambiloto (Andrographis paniculata) leaves extract on the chick chorioallantoic membrane. Observations was made with the macroscopic and microscopic the number of blood vessel growth. Andrographolide and Flavonoid which are concentrated in the extract of Andrographis paniculata leaves are widely known to have antiangiogenic effect. In this study used 24 Eggs which are nine days old were divided into six groups. Three groups are control: 60 ng bFGF; 60 ng bFGF+60 μg celecoxib; and vehicle (DMSO + tris-HCl). The next three groups are extract of Andrographis paniculata leaves that variate in three dosage: 75 μg, 90 μg and 110 μg. The data were tested with ANOVA (Analysis of Variance) and followed by Duncan’s Multiple Range test. There is a significant difference of antiangiogenic between control and treatment group. This results of the study was Andrographis paniculata leaves extract has decrease the number of blood vessel growth on chick embryo chorioallantoic membrane. The optimal dose in this study were the P2, with a dose of 90 μg Andrographis paniculata extract.

Key words: Andrographis paniculata, antiangiogenic, chorioallantoic membrane.