Classification of Severity Cleft Lip Level in 2D Image

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ABSTRACT

Labioschisis or so-called cleft lip is a congenital defect that become problematic in the community, especially residents with low socioeconomic status. The incidence of cleft lip in Indonesia is not known. Research on the abnormalities of cleft lip has been sufficiently developed, but in the Indonesian territory no one has intensively examined the classification of severity cleft lip with 2D images of Indonesian people. A system to detect classify it’s severity has been built with 2D cleft lip images of Indonesian people in a certain area as input to the system. Clock Diagram method[2], used in this research as reference for classifying of the severity of the cleft lip. The result has 3 outputs, cleft lip image segmentation, classification of severity of the primary palate and of the lip. Each has accuracy of 83.91%, 58.97% and 79.49% respectively.

Keywords : cleft lip segmentation, clock diagram, cleft lip severity classification.