

ABSTRACT

Aphthous Stomatitis Recurrent (SAR) is an ulcerative condition in the oral cavity commonly called thrush. SAR can attack the inner cheek mucous membranes, gums, and the inside of the oral cavity. Although this disease is not dangerous but challenges it in the oral cavity which is very difficult, making it difficult to eat, talk and move. Therefore, a system that can help the oral cavity is needed so that it can help the doctor's work.

Telecommunication technology can be applied using sound processing. Sound processing is done by input SAR disease based on human voice in one particular sentence. After that, the preprocessing process is performed, feature extraction using the LPC method and classification using the LVQ. This Final Project aims to make ordinary people and doctors easier to identify SAR disease using sound processing.

Percentage determination is designed using Matlab based software. The data used is 72 data consisting of 48 training data and 24 test data. The feature extraction method used is LPC and its classification is LVQ can produce a program that can determine the type and percentage of disease groups in one sample. From the results of tests conducted, getting the best accuracy of 95.83 %. So it can be concluded that the detection of infection in the oral cavity with the LPC method and the LVQ classification was successful.

Keywords:*Stomatitis aftosa rekuren, LPC, LVQ.*