ABSTRACT

Digital image processing is progressing very rapidly in the field of medicine, as evidenced by the many tools that use technology to diagnose diseases through the image. Diagnosis is do venturing into the field of dentistry including dental radiology. Periapical abscess on a tooth of advanced dental disease dental periapical experiencing pulpitis.One of diagnosis in dental radiology is abscess periapikal.

This research is descriptive in order to detect how these dental health with temporary suspect about periapical abscess. The research using periapical dental radiograph images based Local Binary Pattern (LBP) and Support Vector Machine (SVM). Detection is performed in its application using based android applications.

The application can produces accuracy level 50% with computation time 2,9 seconds when use SVM Linier. Process also use SVM polynomial, the accuracy rise become 61% with computation time 3,1 seconds.

The conclusions is the application can stimulated to detect the abcess with android application. So it can facilitate abscess detection in all doctors in different parts of country, even in the far area are very difficult to get radiology tools because it is very expensive because this application can be shared easily.

Keyword : *abcess, Local Binary Patern (LBP), Support Vector Machine (SVM), dental periapical radiograph*