The use of a dental photography and stone model to evaluate and measure the relative tooth and gingiva dimensions of smile

*Muangmuen T., Vanavit N., *Chansiri S., Boonadulyarat I., Anussornnitisarn S. Department of Prosthetic Dentistry

This study, was intended to evaluate and measure the relative tooth and gingiva dimensions from dental photography and stone model, was divided to 2 purposes: 1. To determine proportion of anterior upper teeth from dental stone model and photography (full smile in frontal view) of 70 third year dental students. The width and height of anterior upper teeth was measured by using veneer caliper, then calculated proportion of the width per height of each teeth and proportion of the width per width of each pairs of adjacent teeth. The collected data was compared between dental photography and stone model using the statistically analysis Paired T-test which indicated that there was statistically difference (p<0.05); meant the proportion of dental stone model is not same as photography, 2 to study the alignment of gingival margin by collecting data from dental stone models only. Central tendency of the collected data was analyzed statistically using Mode. The result was revealed that ; 1) most gingival zenith (in Jongitudinal plane) was located at long axis, 2) most gingival zenith (compared in horizontal plane) of Central incisor was higher than Canine and Lateral incisor, sequently 3) most tip of interdental papilla (measured by divided the height of teeth to 3 portions and recorded that where is interdental papilla was in) was located in cervical third.

Supported by Dental Research Fund, Dental research project 3205-312 # 25 / 2002 Faculty of Dentistry, Chulalongkorn University