The shape of condylar head in free-end tooth loss patient

Budiarto¹, D. Indriastuti², Sumantri², L. Epsilawati².

¹Public Health Department, Faculty of Dentistry, Moestopo Beragama University, Jakarta, Indonesia
²Dentomaxillofacial Radiology, Faculty of Dentistry, Moestopo Beragama University, Jakarta, Indonesia
³Dentomaxillofacial Radiology, Faculty of Dentistry, Padjadjaran University, Bandung, West Java, Indonesia

Introduction: Loss of teeth in large numbers can interfere with the mastication system. This results in an increase in the load of chewing on the TMJ. If there is an increase in load of mastication, there may likely be a change in deformation of head of condyle. Assessment of the shape of condylar head can be done through panoramic radiographs.

Objective: To describe the shape of the head of condyle in free end tooth loss patient with panoramic radiographs.

Materials and methods: This research used description method. The sample was 400 panoramic radiographs, consisted of 200 women and 200 men, with free end tooth loss. Observations that were made on the shape of the head of condyle consisted of four categories: angle, ovoid/round, flat and osteophyte. Results were displayed in percentages of each gender group.

Result: Based on research obtained from radiographs of 200 women, 58 (29%) were ovoid, 55 (27.5%) were angled, and 42 (21%) had osteophyte form. In men, 65 (32.5%) were angled, 60 (30%) were ovoid, and 21 (18.5%) had osteophyte form.

Conclusion: Patients with a free end tooth loss in women and men turned out differently. In women the predominant form is ovoid-shaped while in men the predominant form is angle shape.

Keywords: Shape of condylar head, Free-end tooth loss, Panoramic radiograph