

## **Abstract**

**Objectives :** The purpose of this study was to evaluate the Dental CT image findings of the maxillary sinuses of the Thai asymptomatic patients at the Department of Radiology, Faculty of Dentistry, Chulalongkorn University, Bangkok, Thailand

**Materials and methods :** Dental CT images of 210 Thai patients without any signs and symptoms of the sinuses defects seeking for the dental implant placement during 2007-2010 were collected retrospectively and evaluated. All images were taken by P-mode imaging procedure and assessed by three observers in axial, coronal and sagittal planes. SPSS program and Chi-square Test were used for the statistic analysis

**Results:** The abnormal image findings of the maxillary sinuses were found in 158 sinuses of 104 patients. Thickening or mucositis of sinuses mucosa was the most frequent findings in 34.04%, fluid in the sinuses 1.67%, and mucous pseudocysts 1.43% respectively. An embedded tooth of the third upper molar and a fragment of bone grafting were found in two patients. Gender was significantly associated with these abnormal image findings as male more than female ( $p \leq 0.05$ )

**Conclusion:** About one-third of those asymptomatic patients in this study have shown the abnormal Dental CT image findings of the maxillary sinuses. Most of the findings were not seriously effected for the patients whom seeking for the implantations. Dental CT imaging is one of the valuable diagnostic tools to help the clinician to diagnose and suggest the patients to the appropriate care.

Key words: maxillary sinus, dental CT , cone beam CT