Application of 64-slice CT in the three-dimensional reconstruction of the maxillofacial bone

LIANG Jing-ya, PENG Jun-lin, CHEN Wei-ping
(Department of Radiology, Nanxishan Hospital, Guilin 541002, China)

[Foundation Project]: This Work is Financially Supported by Special Foundation for Clinical Studies from Committee of Medical Journal of Chinese Universities (11221022)

[Author]; Liang Jing-ya (1969-), Male, Huanjiang Guangxi, Technician-in-Charge, M. B., Tel; 13207839889, E-mail: 605781973@qq.com

Received: 2011-11-21 Revised: 2012-04-10 JHMC, 2012; 18(7); 964-966

View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To investigate the value of 64-slice CT in the diagnosis of maxillofacial diseases. Methods: Data of 27 patients with maxillofacial bone lesions that were admitted to our hospital during July 2010 and July 2011 were retrospectively analyzed. All patients underwent 64-slice CT scan and X-ray examination, and the diagnosis revealed by the CT and X-ray were compared with each other, and also compared with what were revealed by surgery. Results: The accuracy rate of X-ray and two three-dimensional images were 74.1% and 85.2%, both were significant lower than 100.0% of 64-slice CT (P < 0.05). Three-dimensional images can reveal the location, shape, and type of the lesions, thus can clearly show anatomical images of complex maxillofacial fractures and their relationship with surrounding structures. Conclusions: The three-dimensional reconstruction technology of 64-slice CT shows important value in the diagnosis of complicated maxillofacial diseases.

[KEY WORDS] Maxillofacial lesions; 64 slice CT; Three-dimensional reconstruction techniques; Diagnosis