A Comparative study of the lateral cephalogram and lateral skull radiograph: A new approach for General Practitioner.

**Introduction**

Lateral cephalometric radiography has been widely used since it was first introduced in 1931 as one of the diagnostic aids to assess skeletal disproportions associated with malocclusion and soft tissue profile in order to provide correct diagnosis and proper orthodontic treatment\(^{(1-4)}\).

As general practitioners are generally the first to see malocclusions, they are supposed to play the important role to carry out the preventive orthodontics and simple tasks of interceptive orthodontics to help correct the mild level of malocclusion or to minimize further development of malocclusion\(^{(5, 6)}\).

However, in most instances in Thailand, the majority of the cephalometer is available solely at the Urban Regional hospitals where most of the orthodontists have been treating their patients. It is obvious that lacking of the expensive cephalometer is the major reason for improper diagnostic information which can lead to inappropriate orthodontic treatment planning for general practitioner in the provincial and rural hospitals.
It would be helpful for orthodontic analysis if the lateral bony radiograph of the skull obtained from the medical x-ray unit commonly found in any hospital could be an alternative to lateral cephalogram. Although the soft tissue profile cannot be seen on the lateral skull headfilm, the appearance of dento-skeletal anatomic structure seen both on the lateral skull film and lateral cephalograph film look similar\(^{(7,8)}\). Despite the possibility that both skull radiographs may give similar cephalometric values, no previous study concerning this point of view has been published. The purpose of this present study was to compare cephalometric measurements obtained from the lateral cephalogram (LC) with measurements obtained from the lateral skull (LS) radiograph.