Discussion

Two important findings emerged from this investigation. First, nearly seventy percent of the whole measurements obtained from LS were statistically not different from LC. Second, nearly eighty percent of the measurements were found to give the high correlation between both techniques, in other words, they are closely related to each other. Moreover, when all measurements for each sample were considered as one group, the similarity of the descriptive cephalometric interpretation of the skeletal and dental pattern obtained from both technique appeared, thus, leading to the same treatment plan consequently.

Even so, the exception was found in the so-called "borderline cases" who possess in between two different classes of skeletal pattern, for example, mild skeletal Class II or III and mesofacial pattern with a dolichofacial or brachyfacial tendency. The cephalometric values from both techniques possibly falled in the different classes of skeletal pattern although they may differ only one millimetre from each other.

From the clinical management point of view, several factors may be involved. Firstly, LC is superior to the medical used LS technique at the point of the former used cephalostat or head holder to fix the patient's head whereas none was used in the latter [7,8]. Lack of contrast and unsharpness

of the image can also be factors leading to uncertainty in the visual identification of radiographic landmarks [10,11]. As in the previous studies, it was found that radiographic image sharpness depends on a number of factors: geometric, photographic, sharpness of the subject itself, and movement during exposure. Factors in the lack of radiographic contrast include those due to the subject, the image recording system, the kVp level and the conditions of viewing [11-12]. However, these factors are controllable so, in order to produce the good image to represent the true patient's skeletal relationship and to minimise the cephalometric error in clinical practice, these involving factors must not be overlooked.

In speaking of general practitioners, it should be noted that basically they are scoped to give the orthodontic treatment only in the patients who have dental malocclusion without skeletal malrelationship in neither the anteroposterior nor the vertical pattern. In reality, most of the orthodontic patients have been treated by general practitioner without lateral cephalogram. Some of them have been treated successfully and finished with the good results while some have failed or ended up with the compromise results. Actually it is multifactorial , however as a matter of fact, the proper diagnosis and treatment plan are mainly the chief factor affect the final result. Therefore, to get advantage for both general practitioner and the patient for this particular condition, the evaluation of cephalographic radiograph is emphasized no matter which technique was

used. On the contrary, patients with underlying jaw deformities may require more advance orthodontic, orthopedic or probably orthognathic surgical treatment which the treatment must be performed only by orthodontists and LC must be inevitably needed. [4,7]

In addition, the primary concern when looking at the LS is its inferiority of lack of soft tissue profile appearance when compare to LC [7,8]. However, it is found from this study that nearly seventy percent of the dento-skeletal measurements obtained from LS did not differ from those of LC statistically. Thus, although the soft tissue profile can not be seen on LS, the interpretation of skeletal relationship from LS combined with the clinical facial profile examination can give enough information for case selection in orthodontic treatment to the general practitioner.