"RELAPSE IN ORTHOGNATHIC SURGERY - A CEPHALOMETRIC ANALYSIS"
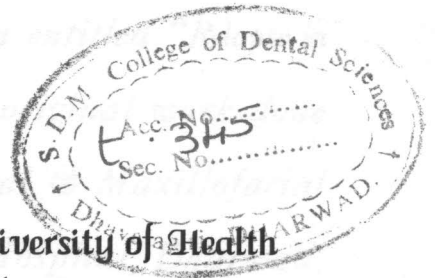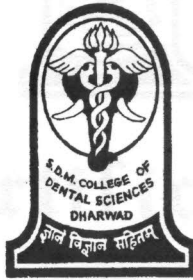
Dissertation Submitted to the Rajiv Gandhi University of Health Sciences, Bangalore, in Partial Fulfilment of the Requirements for the Degree of Master of Dental Surgery, in the Specialty of Oral & Maxillofacial Surgery.

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During the last few decades there has been tremendous expansion in the orthognathic surgical method of treating dento-alveolar and facial deformities. Increasingly sophisticated methods have been designed to enhance the surgical outcome. At the same time the need to predict the end result have grown and retrospective studies of treated patients have provided the clinician with guidelines for estimating the long term effect of the hard tissue surgery on the soft tissues.

Skeletal relapse or change in corrected jaw position is one of the most note-worthy post-surgical complication of the orthognathic surgery. Investigations have shown consistently that the surgical changes are not entirely stable nor is the degree of stability or instability routinely predictable. Inspite of the host of diagnostic and technical advantages and procedural modifications that have been made to improve skeletal stability during the past decades clinical reports indicate that post operative relapse after orthognathic surgery continues to be a major problem.

To date the literature strongly supports the importance of cephalometrics in orthognathic surgery. It is well recognised that the main sources of error in cephalometric measurement is identification and location of standard landmarks in serial tracings. However superimposing pre-operative and post-operative tracings to a fixed landmarks will provide a near accurate changes and hence helps in quantifying the relapse.

Since the well- accepted manual methods tends to be time consuming and may be inaccurate, the applications of computers in the area of diagnosis and treatment planning may help a great deal to precisely predict the outcome of relapse though