

**Skeletal Anchorage System
used in orthodontic treatment of
free end saddle adult patients
with malocclusions
(clinical and cephalometric study)**

**A thesis submitted to the college of dentistry,
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Abstract

The present study was conducted to evaluate the uses of different types of skeletal anchorage system in orthodontic treatment of free end saddle patients with different malocclusions.

The sample consists of five adult patients of both genders, the age 18-35 years old to whom we implant different types of temporary anchorage devices (zygomatic ligature wires, screws and miniplates)

Full clinical examination with complete records had been taken for each patient which includes photographs, orthopantomograph, casts and cephalometric x-ray.

After proper diagnosis and treatment plan the surgical implantation of the skeletal anchorage system had been done and after two weeks the orthodontic treatments were performed.

Tracing for the cephalometric x-ray before and after orthodontic treatment was done, four angles and six lines were determined as proper variables that were evaluated and measured.

After collection of data statistical analysis had been done, clinical findings were collected by asking questions to the patients and practitioners.

The results show that:

The dental effects we got in the upper dentition were more than the lower dentition.

The miniplate usage have us more anchorage and dental effect than the screw and zygomatic ligature wire, but the screw was the simplest device and the least traumatic and can be implanted in different areas in both arches, the least expensive was the zygomatic ligature wire.