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**Original article:**

**Salivary alkaline phosphatase- a biochemical marker for growth prediction**

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**Abstract:**

**Objective:** To evaluate the salivary alkaline phosphatase (ALP) activity in growing subjects in relation to the stages of individual skeletal Maturation using middle phalanx of third finger MP3.

**Material and methods:** The study was conducted on 60 girls and 60 boys who were age group of 10yrs to 15yrs were selected using simple random sampling technique.

Salivary ALP were estimated by the enzymatic method using p- nitro phenyl phosphate as substrate and MP3 stages were assessed using Hagg and Taranger method .Mean salivary ALP and MP3 were compared by analysis of variance ANOVA test .

**Results:** Test showed highly significant differences between ALP and MP3 stages with p value 0.033. Salivary ALP levels showed good association with skeletal age in 13yrs in boys subjects with highest mean ALP and significant value  *p* value of 0 .015 and in 12yrs girls and boys at 13yrs at G stage with maximum growth.

**Conclusions:** Salivary ALP levels can be used as an additional diagnostic tool to optimize orthodontic treatment timing