

Association Between ABO Blood Grouping and Odontometry: An Unexplored Evidence in Forensics

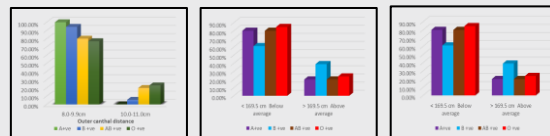
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Background: Recent research has exhibited a strong association between ABO blood groups and susceptibility to diseases. Extraoral and intraoral hard tissue landmarks provide a stable and reliable record for odontological and anthropological analysis, forensic investigations and identification. The association between anthropometric indices and ABO blood grouping have been reported in the past, however, the association between ABO blood groups and odontometric indices is yet to be comprehensively explored. This study aimed to establish the correlation of ABO blood groups with odontometric indices and extraoral hard tissue landmarks for



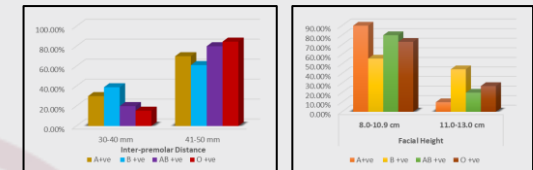
Incisal width Inter canine distance Molar relation

Methodology: A total of 200 subjects were selected, aged between 18-25 years. Blood groups of the subjects were determined and dental parameters measured were incisal height, incisal width, inter-canine distance, inter-premolar distance and molar relation. The skeletal parameters recorded were facial divergence, facial height and bi-zygomatic width. The stature (height) and weight of each subject was also recorded. The recorded values were tabulated and statistically analysed using SPSS software version 22, IBM Corporation, USA.



Correlation of ABO blood groups with odontometric indices

Results: A notable difference in the distribution of various anthropometric parameters among the ABO blood groups was observed in our study



Correlation of ABO blood groups with odontometric indices

Conclusion: A positive association of ABO blood groups with skeletal and odontometric parameters may be used as a valuable source of information in forensic odontology. As teeth dimensions and arch parameters are exclusive to each individual, association of population specific data and blood grouping would provide significant assistance to the forensic expertise in identification of individuals during ante-mortem and post-mortem analyses.