Indian Journal of Basic and Applied Medical Research; June 2015: Vol.-4, Issue- 3, P. 467-477

**Original article
Study of Palmar dermatoglyhics in ABO and Rh Blood groups**

**1Dr.Manoranjitham.R.,M.S, 2Dr.Arunkumar K R .M.D, 3Dr. Suresh R Gosai M.D.,4 Dr.Shalini. R.M.D, 5Dr.Rahul H. Dandekar., M.D**

[ **1**Associate Professor, 2Asst Prof , 3H.O.D & Prof , 4Asst Prof ,5 PS&M ]
Name of the Institute/college: Department of anatomy, Dhanalakshmi Srinivansan Medical College & Hospital.
Corresponding author : Dr.Manoranjitham.M.S. , Associate professor, Department of anatomy, Dhanalakshmi srinivasan medical college and hospital, Perambalur, Tamilnadu

**Abstract:**

**Introduction**: Dermatoglyphics is the study of dermal ridge configurations on the skin covering the palmar and plantar surfaces of hand and feet.

**Objectives:** (a) to study the distribution of fingerprint pattern in ABO and Rh blood groups.(b) to study the correlation between dermatoglyphics and ABO, Rh blood groups and evaluate the significance.

**Methods:** A total of 600 students of Dhanalakshmi Srinivasan Medical College, Perambalur, South India with known blood groups were included in this study.Finger prints were obtained by ink method.The finger print patterns were classified into Arches,Loops-radial and ulnar loops and Whorls.The correlation was analysed statistically using chi-square test.

**Result:** Majority of the subjects were of blood group O (39.2%) followed by blood group B (33.5%), A (21.3%) and AB(6%). 94% of subjects belong Rh positive. The commonest finger tip pattern was Ulnar loop (57.7%), followed by Whorls (33.9%), Arches (6.9%), Radial loops (1.5%). The incidence of Archs was high in group O (7.2%) and lowest in AB group(4.4%). Whorls were more common in AB group (38.1%) and less frequent in blood group A. Ulnar loops were high in group A (58.9%) and low in group B(55.9%).Radial loopswere almost equally seen in the order of A group (1.8%), B (1.7%),AB (1.4%) and (1.3%).The incidence of ulnar loops was higher in Rh positive (57.8%), arches were more common in Rh negative and whorls were equally seen in both Rh positive and negative blood groups.Conclusion:The study suggests an association between dermatoglyphics and blood groups.

**Key words**: Dermatoglyphics, blood groups, finger tip patterns