

# The Trilogy of Dactylography, Cheiloscopy and Bloodgroups- A Futuristic AID in Forensic Investigations

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## Dear Editor,

Personal Identification is of paramount importance not only in legal medicine but also in medico-legal investigation and genetic research. Identification means the determination of the individuality of a person. The use of prints as a mean of personal identification is one of the common methods in forensic anthropology and the most popular prints are fingerprints and lip prints, which are normal lines and fissures in the form of wrinkles and grooves present in the zone of transition of human lip. Theory of uniqueness and individualistic of the fingerprints and lip prints and co relationship with the blood group have been proven to be an imperative tool in identifying a person.

Several studies have been carried out in these regard with most of the studies showing a significant co relationship between the fingerprints and the blood group with only handful of studies showing co relationship among fingerprints, lip prints and blood group. The pattern of fingerprints and lip prints were shown to be stable relative to surrounding anatomy and with passage of time and also in its easiest way of recording and documentation.<sup>1</sup>

Lip prints and fingerprints are frequently encountered in medico legal investigations and in Forensic science laboratories as important form of transfer evidences. Blood itself is an extremely important entity in the medico legal practice, which alone or along with other the prints can play a clinching role to unfold different criminal problems.<sup>2</sup>

Rastogi P and Pillai KR conducted a prospective study on 200 medical students at Kasturba Medical College, Mangalore, Karnataka and showed that loops were the most commonly occurring fingerprint pattern and arches were the least common. Loops were predominant in all blood groups except O negative where whorls were common.<sup>3</sup>

Muralidhar Reddy Sangam, A Ramesh Babu, *et al.* concluded that prediction of blood group to some extent may be possible with the study of finger print pattern and may be of great value in Forensic Medicine, but there were regional variations, gender and genetic factors.<sup>4</sup>

Verma P, Sachdeva SK, *et al.* found that branched lip pattern was most prominent and confirmed the distinctiveness of cheiloscopy but

disproves any statistical correlation of lip print with blood groups.<sup>5</sup> The same were the findings of Telagi N, Mujib A, *et al.*<sup>6</sup>

Y. N. Umraniya , H. H. Modi *et al.* in their study concluded that whorls were highest in AB blood group, Loops were highest in A blood group, Arches were highest in B blood group. Arches were higher in Rh negative blood group as compared to Rh positive blood group and the difference was statistically significant.<sup>7</sup>

Ashwinirani *et al.* in their study of lip prints in relation to blood group stated that reticular pattern was the most common lip pattern noted with predominance of B<sup>+</sup>, AB<sup>+</sup> and O<sup>+</sup> blood group among reticular variety.<sup>8</sup>

To utilize the mammoth role of prints and blood groups in forensic investigations which is still in an inexact science, it is necessary to perform more studies on different and wide variety of population groups to analyze the variations and to establish a database which will be a great deal in identification. One such attempt is being made by us at Travancore Medical College, Kollam, Kerala by comparing the said details of around 400 Medical Students from Kollam region.

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