

Cheiloscopy and Dactylography in Relation to ABO Blood Groups: Egyptian vs. Malay Populations

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Abstract : Establishing association between lip print patterns and those of fingerprints as well as blood groups is of fundamental importance in the forensic identification domain. The first aim of the current study was to determine the prevalent types of ABO blood groups, lip prints and fingerprints patterns in both studied populations. Secondly, to analyze any relation found between the different print patterns and the blood groups, which would be valuable in identification purposes. The present study was conducted on 60 healthy volunteers, (30 males and 30 females) from each of the studied population. Lip prints and fingerprints were obtained and classified according to Tsuchihashi's classification and Michael Kuchen's classification, respectively. The results show that the ulnar loop was the most frequent among both populations. Blood group A was the most frequent among Egyptians, while blood groups O and B were the predominant among Malaysians. Significant relations were observed between lip print patterns and fingerprint (in the second quadrant for Egyptian males and the first one for Malaysian). For Malaysian females, a statistically significant association was proved in the fourth quadrant. Regarding the blood groups, 89.5% of ulnar loops were significantly related to blood group A among Egyptian males. The results proved an association between the fingerprint pattern and the lip prints, as well as between the ABO blood group and the pattern of fingerprints. However, further researches with larger sample sizes need to be directed to approve the current results.

Keywords : ABO, cheiloscopy, dactylography, Egyptians, Malaysians

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