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Poroscopy: Study of Sweat Pores in Central Indian Population

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Abstract

The uniqueness of human fingerprint plays the most prominent role in forensic investigation as a physical evidence which is useful for Criminal identification. With its unique feature no two fingerprints have ever been found to be identical for identification of fingerprint poroscopy is used. Poroscopy is the 'study of sweat pores on a fingertip. It is personal identification method. Poroscopy is third level detail of the friction ridges are and therefore, felt more accurate. And reliable. We collected 50 sample from central Indian population and compare them. In this we found the frequency of sweat pores are more in female as compared to male.In female mostly triangular and oval shape pores are found in male rounded pores are found.

Keywords – uniqueness, friction ridge , Central India, Poroscopy, sweat pores.

Main Text

Poroscopy is examination of impression left by the sweat pores of fingers to check or support fingerprint evidence.

Edmond Locard in France in 1902.He found that fingertip sweat pores vary in size, shape, position on ridge and number and frequency.Poroscopy has been accepted and used in courts and gas a scientific basis.

Poroscopy is the study of sweat pores present on the friction ridges of palmar and plantar surface and is method of personal identification.Locard observed the ridge characteristics present on the fingerprint pattern and showed that the sweat pores are permanent, immutable and individual.

Poroscopy was also used as a valuable tool in anthropological Studies in forensic science and considered as an essential component in the modern automated fingerprint recognition system.

Poroscopy is third level detail of fa friction ridges and therefore felt more accurate and reliable. Poroscopy is used in criminalistic together with Dactyloscopy for purpose of identification. It involves study of pores visible in impressions left at the crime scene and in the fingerprints of a person. when the impression is not such a good quality or comparison, the expert used the poroscopy as an another means of identification.

Material and Methodology

A total number of 50 samples were collected from male and female individuals from Central India. Plain and Rolled fingerprint impressions were collected FBI fingerprint cards.

The collected sample were then analyzed through a stereo microscope and photomicrography. for the shape and number of sweat pores on the friction ridges.

In this paper we analyzed and calculate the number of pores from central region of right hand thumb .The analysis was conducted by counting number of pores on seven of ridges from the centre.

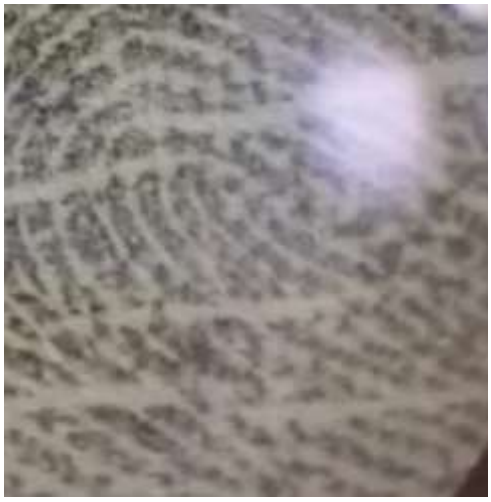

Figure-1

Figure -2

Figure – 3.

Figure -4

Figure – 5

Figure-6

Observation

Sample Number	Female	Male
Sample -1	18	18
Sample -2	17	20
Sample -3	17	17
Sample -4	20	17
Sample -5	19	13
Sample -6	19	22
Sample -7	20	15
Sample -8	25	23
Sample -9	20	23
Sample -10	22	22
Sample -11	24	23
Sample -12	23	18
Sample -13	20	12
Sample -14	23	19
Sample -15	17	23
Sample -16	26	20
Sample -17	23	20
Sample -18	17	19
Sample -19	18	19
Sample -20	25	18
Sample -21	22	12
Sample -22	26	17
Sample -23	20	19
Sample -24	21	18
Sample -25	24	13
Average	**21.04**	**18.4**

Result And Discussion

From above observation The frequency and number of pores are more in female as compared to male. In male the highest number of pores is 23 and in female the highest number of pores is 26.

The average we calculate, for female average is 21.04 and for male average is 18.4 .

Conclusion

This study provide useful information about sweat pores present on friction ridges.Poroscopy is third level detail identification of fingerprint. It is very useful in cases where few ridges are encountered.This data can further be used in forensic research. Poroscopy is more accurate and reliable. & method for identification.

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