DERMATOGLYPHICS IN CORONARY ARTERY DISEASE

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SUMMARY AND CONCLUSION

Dermatoglyphics is a scientific method of analyzing of ridge patterns by studying finger and palmar prints, which are under genetic control. Dermatoglyphics analysis has been established as a useful diagnostic and research tool in genetics, medicine, and anthropology. The etiology of coronary heart disease is believed to be multifactorial with genetics playing an important role. Variations in dermatoglyphics in such patients are therefore, expected.

The present study was carried out on 54 patients of coronary artery disease attending the Cardiology OPD and 54 controls.

In the present study, there was significant increase in the whorl pattern in all digits of right side as compared to left side, where as digit IV shows maximum number of whorls.

There was significant decrease in the frequency of loop pattern in both right and left hand, more in the right hand, particularly in index finger. The decrease in the frequency of ulnar loop was highly significant as compared to radial loops.

There was no significant decrease in the frequency of the composites pattern in both hands was observed.

Arches were present maximum in index finger of both hand whereas, the significant decrease was found in arch pattern frequency in left middle finger.

There was increase in the pattern intensity index, decrease in the Dankmeijer's index, increase in the Furuhata's index indicating increase in number of triradii, a low frequency of arches as compared to whorls and the high occurrence of whorls as compared to loops in the patients.

There was significant difference in the mean value of TFRC, while difference in the mean value of AFRC was observed highly significant.

We can conclude and hypothesize that, merely by identifying increase in the whorl and decrease in the loop pattern in the fingerprints (as observed in the present study), persons with high risk of coronary artery disease can be identified early and preventive measures can be taken against serious complications.