

**PALMAR DERMATOGLYPHIC PATTERNS
IN CASES OF IDIOPATHIC GENERALIZED
EPILEPSY**

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SUMMARY

Genetic etiology has been proposed for both idiopathic epilepsy and dermatoglyphics. Hence, the present study has been undertaken to find out the existence of any correlation between dermatoglyphics and Idiopathic Generalized Epilepsy.

The Control Group (n=50) consisted of normal subjects free from H/O epilepsy, convulsions or seizures in the past. The Case Group (n=50) consisted of patients of IGE who were free from H/O epilepsy in the past associated with a variety of cerebral or systemic disorders in the form of chronic infantile spasms, specific or flaccid paraplegia or tetraplegia, cardiac, ocular or other diseases and epileptic subjects with H/O previous trauma or meningitis infections etc.

SUMMARY

The standard ink method was used for obtaining finger and palmar prints.

Following parameters were studied:-

- 1) Fingertip patterns, finger ridge count (total and absolute).
- 2) Main Lines, Main Line index, angles 'atd', 'dat', 'adt'.
- 3) Furuhashi's Index and Dankmeijer's Index

The present study showed a significant decrease in whorls and an increase in arches in both the hands of male and female IGE patients. Loops were increased in both hands of female patients. TFRC and AFRC

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were significantly decreased in cases when both the hands were taken together.

Main line D was mostly confined to sectors 11, 9 and 7 in both sexes among the cases and controls. Main line C terminated quite often in sectors 9, 7 & 5" in males and females of the case series. Main line B terminated most frequently in sectors 5" & 7 in control and case groups. Main line A terminated most frequently in sector 5' in males and females.

A non-significant difference in other parameters viz. MLI and angles ('atd', 'adt' & 'dat') was noted in both the hands. Furuhata's Index was decreased while Dankmeijer's Index was observed to be increased.

These parameters may be of immense help not only in identifying pre-epileptics but can be helpful in preventing serious complications of epilepsy, which is a leading problem of the world.