

**DERMATOGLYPHICS IN TYPE II  
DIABETES MELLITUS**

**Thesis For The Degree Of**

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***(Anatomy)***

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*SUMMARY*  
&

*CONCLUSION*

## SUMMARY AND CONCLUSION

Dermatoglyphics in type II DM has been studied with views to identify significance of dermatoglyphics for early detection of patients with type II DM and identifying normal people who are prone to Type II DM.

50 cases of type II DM have been included in present study who were free from associated complications like thyroid dysfunction, coronary artery disease or renal disorders etc. Written informed consent was taken from all cases and 40 controls.

The standard ink method as suggested by Henry ER was used for obtaining finger and palmar prints (6).

Following parameters were studied:-

- 1) Finger tip----patterns, finger ridge count (total and absolute).
- 2) Palm---triradii, total number of triraddi, Main Lines, Main Line index, angles 'atd', 'dat', 'adt'.

The present study showed significant decrease in whorls in both the hands and also in middle finger of Rt hand and ring finger of Lt hand, in type II DM patients. Angle 'atd' showed significant decrease and angle 'adt' showed significant increase in both the hands. Decrease in whorls was also found by previous workers

who had studied Type II DM patients, but decrease in angle 'atd' and angle 'adt' in type II DM has not been described so far.

Presence of axial triraddi t' in type II DM is highly significant ( $p < 0.001$ ) irrespective of sex.

Also, high transversality of line A has been observed, which is highly significant ( $p < 0.001$ ) in both hands in type II DM patients. In addition the present study shows significant decrease in frequency of termination for main line B and D towards sector 9 and 11 in right hand respectively, whereas increase in frequency of termination of line B towards sector 5' in left hand. Other parameters like finger ridge counts and Main Line Index do not show any significant differences.

Presence of additional axial triraddi t' has been found to be highly significant in diabetics as compared to controls in which the additional axial triradii t' is totally absent. The presence of t'' was not found in any of the cases.

There is significant decrease in the whorls in both hands of diabetics along with decrease in whorls in right 3<sup>rd</sup> and left 4<sup>th</sup> finger. The high transversality of Main Line A is one of the new and significant finding in the present study.

These parameters may be of immense help not only in identifying pre-diabetics but can be helpful in preventing serious complications of diabetes, which is a leading problem of developing countries.