





the onset of Asperger syndrome and Ret syndrome. Severe forms of manifestations include hearing loss, mental retardation with epilepsy, dislexy, Martin bell's syndrome and rare cases of tuberous sclerosis. In Digital dermatoglyphics, patients suffering from this syndrome have a high frequency of arches and lower loops. Arches of fourth and fifth fingers and first finger of left hand shows higher frequency than the others. Palmer dermatoglyphic distortions were common in left palm. These patients show prominent increase in ulnar loops. [1][3][9][10][23]

#### **OTHER PATHOLOGICAL CONDITIONS:**

##### **DOWN'S SYNDROME:**

Down's syndrome is a genetic disorder caused by presence of third copy of chromosome 21. It is a common disease characterized by facial abnormalities and decreased intellectual capacities. It results in severe infections of upper respiratory tract due to partial defects in immune systems.[6] Manifestations of down's syndrome include high frequency of creases, bilateral, radial loops on digits 4 and 5 and ulnar loops.[11][15]

##### **HYPOPARATHYROIDISM:**

Hypoparathyroidism is a decreased function of parathyroid hormone due to surgery of thyroid and parathyroid glands. It causes cramping and twitching of muscles leading to tetany and several other symptoms. Hypoparathyroidism is caused by reduction in circulating parathyroid hormones, hypocalcaemia and hyperphosphatemia.[5] It is characterized by short broad bands and increased arch patterns. [11][15]

##### **RUBINSTEIN-TAYBI SYNDROME:**

It is also known as Rubinstein syndrome or broad thumb hallux syndrome characterized by shot stature, mental disability, broad thumbs and first toes and facial anomalies. They show four or more arches in finger tips and are bilateral.[11][15]

##### **PALMAR DERMATOGLYPHICS IN MALE CATIONIC SCHIZOPHRENIA:**

Schizophrenia is a neural disorder in which the patient has impairment in perception and thought processing.[4] In this case subjects were found to have more number of arches and loops and less whorls. [7]

#### **CONCLUSION:**

This review brings out the importance of dermatoglyphic studies in various fields. The dermatoglyphics are important in forensic sciences due to their important feature that fingerprints are unchanged in due course even after death. Different patterns of fingerprints represent various pathologies. Dentists are benefitted as they analyzers are able to determine clefts, caries and submucous fibrosis by observing the various patterns of the patients palms. By analyzing these patterns, the analyses were able to find significant variations which represent those pathologies.

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