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Study of Dermatoglyphics Pattern in Patient with Hypertension

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Abstract : Introduction: Dermatoglyphics is the science which deals with the study of dermal ridge configuration on the digits, palms and soles. It is grooved by ridges and forms variety of configurations. The aim of the study was to identify dermal ridge patterns on fingertip of hypertensive patients and in normal population and to compare patterns among them. Methods: The subjects of the study were 130 hypertensives and 130 non-hypertensives cases of Kathmandu Valley aged between 40 to 80 years. Case history was recorded after consent finger prints were taken. Different parameters as whorl, loop, arch and composite patterns were studied and analysed. Result: It revealed, increased whorl pattern in hypertensive. It showed 65.69% whorl, 29.23% loop and 5.07% arch patterns in right hand of hypertensive people. In control, it was found to be 34.46% whorl, 58.15% loop and 5.38% arch patterns respectively. Similarly in left hand 63.69% whorl, 32% loop and 4.30% arch in hypertensive group. In control group it was 60.15% as loop, 35.69% as whorl and 15% as arch. Discussion: Based on findings of the result, it was concluded that the whorl, loop and arch patterns observed as 65.69%, 29.23% and 5.07% respectively in hypertensive cases in right hand. Similarly in left hand, it was found to be 4.30% as arch, 32% as loop and 63.69% as whorl patterns, but in normotensive subjects these patterns were recorded as 36.43%, 58.15%, 5.38% in right hand and 35.69%, 60.15%, 4.15% in left hand as whorl, loop and arch respectively.

Keywords: arch, dermatoglyphics, hypertension, loop, whorl

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