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ABSTRACT

Objective: To examine the relationship between malignant mammary neoplasm and dermatoglyphic patterns of hands.

Methodology and results: Palmar and digital prints from 20 women with histologically proven malignant mammary neoplasm (case group) were compared to palmar and digital prints from 25 women with no history of any malignant diseases (control group) to establish a relationship with dermatoglyphic patterns of hands. Of the patterns analyzed, ulnar loop showed a statistically significant association with malignant mammary neoplasm in 8 out of 10 digits, which has the highest mean percentage frequency of digital pattern followed by whorls, arch and lastly the radial loop. Women with malignant mammary neoplasm showed significantly high mean DAT angle (62.70 ± 2.85 and 61.66 ± 2.56) for right and left

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hand, respectively, and a reduced total ridge count (12.61 ± 2.21) .

Conclusion and application of findings: the results demonstrate that dermatoglyphic patterns and values could be used as noninvasive anatomical markers of malignant mammary neoplasm. However, further studies are needed to confirm these findings for Nigerians, possibly using larger populations.

Key words: Malignant mammary neoplasm, dermatoglyphics, DAT angle.