The Future of Skin Cancer Detection: Diagnosis without Needing to be Cut

SKIN: The Journal of Cutaneous Medicine®, Integrating Electrical Impedance Spectroscopy into Diagnostic Decisions Improves Accuracy: A Multitiered Study

NEW YORK, NY, USA, September 15, 2020 /EINPresswire.com/ -- Melanoma is the sixth most common type of cancer. Almost 200,000 Americans, men and women, are diagnosed with melanoma every year with over 7,000 deaths because of melanoma annually. If caught early, melanomas can be more easily managed and cut out and carries a much better clinical course. A new study published in SKIN: The Journal of Cutaneous Medicine® has found that using a new FDA-approved device can not only make the diagnosis of melanoma more accurate, but also reduce the need to perform any surgeries to make the diagnosis. The device measures how easily electricity can travel around skin cells and generates an easily interpretable score between 0 to 10, where higher numbers are more suggestive of melanoma than lower numbers.

> “This new FDA-approved device can reduce the number of surgeries needed to diagnose melanoma by over 15%.”
> *Graham H. Litchman, DO, MS*

Graham H. Litchman, DO, MS and colleagues showed 43 randomly chosen pictures of confirmed melanomas and non-cancerous skin spots to over 500 dermatologists, dermatology residents, and nurse practitioners/physician assistants. They showed these 43 images to clinicians and asked them would they consider surgery to diagnose the melanoma. They then showed them the 43 images again, this time with a score generated by the device, and asked them would they now consider surgery.

The study found that not only did using this new technology reduce the number of missed melanomas from 80 to 153 down to 7 to 13 but did so while also reducing the number of “theoretical” surgeries by over 15%. Furthermore, regardless of experience, the authors found that this technology improved decision making across the board.

The authors concluded that this technology could have the best benefit for suspicious skin spots that are “on the fence” when examined by a doctor and might not have all the hallmarks for melanoma skin cancer. Incorporating this technology may have even greater social and economic impact by reducing potentially unnecessary surgeries and associated anxiety and may even be able to catch melanomas earlier than if a more conservative watch-and-wait approach

were used to see if the suspicious skin spot grows, changes color or evolves in a concerning way.

SKIN: The Journal of Cutaneous Medicine® is a peer-reviewed online medical journal that is the official journal of The National Society for Cutaneous Medicine. The mission of SKIN is to provide an enhanced and accelerated route to disseminate new dermatologic knowledge for all aspects of cutaneous disease.

For more details please visit www.jofskin.org or contact jofskin@gmail.com.

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