Medical Xpress

Articles examine relationship between skin and endocrine disorders

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Two studies and an editorial published online by *JAMA Dermatology* examine the relationship between skin disorders and endocrine diseases.

In the first study, Dipankar De, M.D., of the Postgraduate Institute of Medical Education and Research, Chandigarh, India, and coauthors looked at the association between insulin resistance and metabolic syndrome in male patients with acne (ages 20 to 32). The study included 100 men with acne and 100 men without.

The authors report the prevalence of insulin resistance was higher among the men with acne (22 percent) compared with the healthy control patients (11 percent). The prevalence of metabolic syndrome was not statistically significant between men with acne and without. The prevalence of insulin resistance and metabolic syndrome also did not differ significantly among men when they were grouped by the severity of their acne.

A limitation of the study is its cross-sectional design because it looks at a population at a moment in time.

"These patients should be followed up to determine whether they develop conditions associated with insulin resistance," the authors conclude.

In a second study, Kanade Shinkai, M.D., Ph.D., of the University of California, San Francisco, and coauthors identified skin features of

polycystic ovary syndrome (PCOS). The study included 401 women (median age 28) with suspected PCOS.Overall, 68.8 percent of women (276 of 401) met PCOS diagnostic criteria. Most women (91.7 percent [253 of 276]) who met the criteria for PCOS had at least one skin finding.

Women who met the criteria for PCOS were more likely than women who did not meet the criteria to have acne (61.2 percent vs. 40.4 percent); hirsutism or facial and trunk hair growth (53.3 percent vs. 31.2 percent); and acanthosis nigricans (AN) or dark areas on the skin (36.9 percent vs. 20 percent).

The authors note hirsutism affects 5 percent to 15 percent of women in the general population, while AN is estimated to affect 20 percent of the U.S. population. Also, while acne is a common skin feature in women with PCOS, it did not distinguish between women suspected of having PCOS and those meeting the diagnostic criteria.

The authors note limitations to their study including a comparison group not comprised of healthy controls but of women with suspected PCOS who did not meet the diagnostic criteria.

"This study demonstrates that hirsutism and AN are the most useful cutaneous indicators of PCOS to distinguish patients most at risk for having PCOS among a suspected population," the authors conclude.

In a related editorial, Rachel V. Reynolds, M.D., of Beth Israel Deaconess Medical Center, Boston, writes: "The findings of these two studies remind us that as dermatologists, our detective work goes beyond identifying patterns on the surface to clinch a diagnosis. Thoughtful evaluation of even the most common of skin disorders provides the opportunity to take a deeper dive into the understanding of our patients' general physical and emotional well-being."

More information: De at al, *JAMA Dermatology*. Published online December 23, 2015. DOI: 10.1001/jamadermatol.2015.4499

Shinkai et al , *JAMA Dermatology*. Published online December 23, 2015. DOI: 10.1001/jamadermatol.2015.4498