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Central centrifugal cicatricial alopecia pathogenesis studied

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Protease-activated receptor 2, which is activated by cowhage, may play a role in central centrifugal cicatricial alopecia, the most common cause of scarring hair loss in African-American women, according to research published online Sept. 17 in the *British Journal of Dermatology*.

(HealthDay)—Protease-activated receptor 2 (PAR-2), which is activated by cowhage, may play a role in central centrifugal cicatricial alopecia (CCCA), the most common cause of scarring hair loss in African-American women, according to research published online Sept. 17 in the *British Journal of Dermatology*.

To investigate the neural component of CCCA, Ghada A. Bin Saif, M.D., of the King Saud University in Riyadh, Saudi Arabia, and colleagues conducted a study involving 15 healthy African-American women and 16 African-American women with CCCA. All women

underwent computerized thermosensory testing to assess warmth and heat pain thresholds. The intensity of itching was assessed following histamine iontophoresis and the application of cowhage spicules, which activates PAR-2.

The researchers found that CCCA severity correlated significantly with peak itch ratings following cowhage, but not histamine, application to the lesional scalp of women with CCCA. In both healthy women and those with CCCA, warmth and pain thresholds were higher on the crown than the occiput.

"Our results suggest a putative role for PAR-2, which is activated by cowhage, in the pathogenesis of CCCA," the authors write. "Future studies should examine PAR-2 directed therapeutics for CCCA patients. Examining for itch and other dysesthesias in CCCA patients is of vital importance to dermatologists in assessing disease severity."

More information: Abstract
Full Text (subscription or payment may be required)