

S. aureus, enterotoxins ID'd in atopic keratoconjunctivitis

April 24 2012



(HealthDay) -- *Staphylococcus aureus* (*S. aureus*) and *S. aureus*-secreted enterotoxins (SE) are frequently found in patients with atopic keratoconjunctivitis (AKC), particularly in those with corneal ulceration, according to a study published online April 10 in *Allergy*.

Hiroshi Fujishima, M.D., from the Tsurumi University School of [Dental Medicine](#) in Yokohama, Japan, and colleagues enrolled 18 individuals with AKC, nine with vernal keratoconjunctivitis (VKC), eight with seasonal allergic [conjunctivitis](#) (SAC), and 10 healthy volunteers to investigate the role of SE in the pathophysiology of AKC. Participants underwent slit lamp examinations, including fluorescein staining. Samples were collected from the skin around the eyelid margins, lower conjunctival sacs, and upper tarsal conjunctiva. Superantigen (SAg) genes were identified using [polymerase chain reaction](#) assays.

The researchers found that, compared with VKC patients, SAC patients, and healthy volunteers, *S. aureus* was detected significantly more in AKC patients. In 11 patients, SAg genes were identified and included SEB (two of 11), SEG (eight of 11), and SEI (eight of 11). SE detection varied significantly between AKC and SAC patients. SE was detected in significantly more patients with corneal ulcers (six of 10) than in patients without corneal ulcers (two of 17).

"*S. aureus* and SE were frequently found in association with corneal ulceration, suggesting a pathogenic role in the development of ulcers in AKC," the authors conclude.

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Citation: *S. aureus*, enterotoxins ID'd in atopic keratoconjunctivitis (2012, April 24) retrieved 27 April 2024 from
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