



Invited review article

Japanese guidelines for allergic conjunctival diseases 2017[®]

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ABSTRACT

The definition, classification, pathogenesis, test methods, clinical findings, criteria for diagnosis, and therapies of allergic conjunctival disease are summarized based on the Guidelines for Clinical Management of Allergic Conjunctival Disease (Second Edition) revised in 2010. Allergic conjunctival disease is defined as "a conjunctival inflammatory disease associated with a Type I allergy accompanied by some subjective or objective symptoms." Allergic conjunctival disease is classified into allergic conjunctivitis, atopic keratoconjunctivitis, vernal keratoconjunctivitis, and giant papillary conjunctivitis. Representative subjective symptoms include ocular itching, hyperemia, and lacrimation, whereas objective symptoms include conjunctival hyperemia, swelling, folliculosis, and papillae. Patients with vernal keratoconjunctivitis, which is characterized by conjunctival pseudoepithelial changes called giant papillae accompanied by varying extents of corneal lesion, such as corneal erosion and shield ulcer, complain of foreign body sensation, ocular pain, and photophobia. In the diagnosis of allergic conjunctival disease, it is required that type I allergic diathesis is present, along with subjective and objective symptoms accompanying allergic inflammation. The diagnosis is ensured by proving a type I allergic reaction in the conjunctiva. Given that the first-line drug for the treatment of allergic conjunctival disease is an antiallergic eye drop, a steroid eye drop will be selected in accordance with the severity. In the treatment of vernal keratoconjunctivitis, an immunosuppressive eye drop will be concomitantly used with the above-mentioned drugs.

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1. Definition and classification of allergic conjunctival disease

1.1. Definition

Allergic conjunctival disease (ACD) is defined as "a conjunctival inflammatory disease associated with a type I allergy accompanied by some subjective and objective symptoms." Conjunctivitis associated with type I allergic reactions is considered allergic conjunctival disease even if other types of inflammatory reactions are involved.

^{*} This article is an updated version of "Japanese guideline for allergic conjunctival diseases" published in *Allergol Int* 2011;60:191–203.

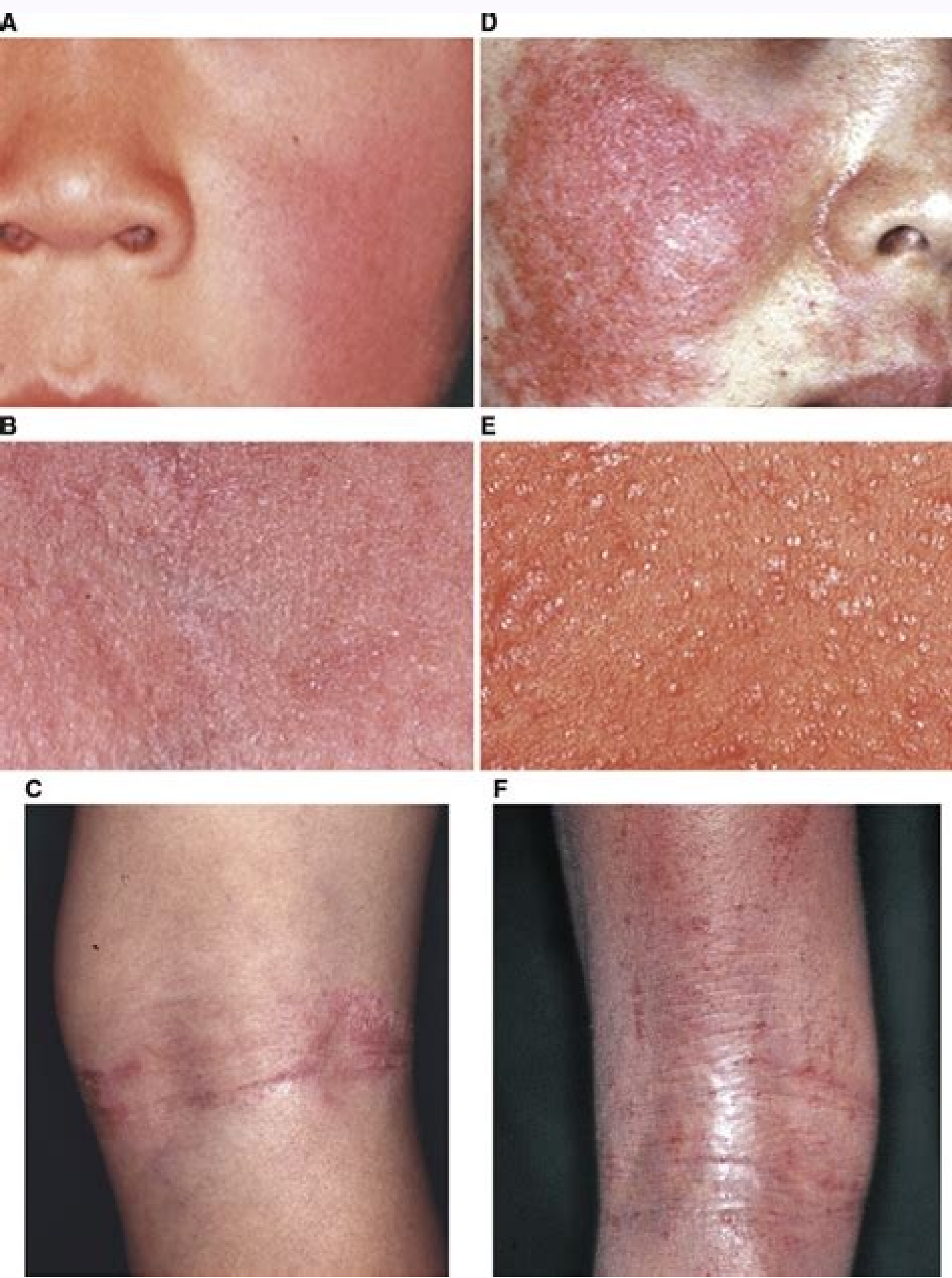
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Conjunctivitis
Community and Public Health

Conjunctivitis (Pink eye)

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Conjunctivitis is inflammation or infection of the conjunctiva, the clear membrane lining the eyelids and covering the eye.
 It may be caused by a virus or bacteria, or by an allergy or reaction to something in a physical or chemical in the environment.

What are the symptoms?

- Irritation, gritty feeling, and redness of the eye
- A discharge
- Crusts that form on the eyelid overnight
- Tears
- Eye pain
- Swelling of the eyelids (in severe cases)
- Sensitivity to light
- Symptoms appear 24-72 hours after catching conjunctivitis
- More likely to be in just one eye with only a slight discharge, and may be associated with other symptoms like a sore throat.

How is it caught?

It is spread through contact with the discharge from the eye of an infected person. This can be transmitted through fingers and towels or other articles contaminated by these secretions. It can also be spread from person to person by contact with an infected person and then touching the eyes.

In some cases, nose and throat secretions may also be infectious. A person is contagious while they have a discharge. Children should stay away from school/day care until their eye is no longer pink or until after 24 hours of treatment.

How is it treated?

It is best to see a doctor if you or your child has conjunctivitis. The bacterial form of conjunctivitis should be treated with antibiotic eye drops or ointment.

Who is affected?

Children under the age of five are most often affected with the bacterial form, but people of all ages can be infected with viral conjunctivitis. Conjunctivitis may recur. Viral conjunctivitis differs from bacterial conjunctivitis by being more likely to cause a watery discharge that can be crusty in the morning but not too thick. It usually begins in one eye then affects the other eye within 24-48 hours and may include cold-like symptoms.

Newborn babies can catch a form of conjunctivitis from the mother's birth canal and can be serious and needs prompt treatment with antibiotics.

How is the spread prevented?

Good hygiene helps prevent the spread of conjunctivitis, and this includes:

- Keeping hands away from the eye,
- Washing hands frequently,
- Replacing eye cosmetics regularly,
- Not sharing towels or handkerchiefs,
- Proper use and care of contact lenses.

to topical eyedrops. *Curr Opin Allergy Clin Immunol* 2005;5:459-463. [PubMed]167. Rossi GC, Tinelli C, Pasinetti GM, Milano G, Bianchi PE. Dry eye syndrome-related quality of life in glaucoma patients. *Eur J Ophthalmol* 2009;19:572-579. [PubMed]168. Leung EW, Medeiros FA, Weinreb RN. Prevalence of ocular surface disease in glaucoma patients. *J Glaucoma* 2008;17:350-355. [PubMed]169. Zimmerman TJ, Hahn SR, Gelb L, Tan H, Kim EE. The impact of ocular adverse effects in patients treated with topical prostaglandin analogs: changes in prescription patterns and patient persistence. *J Ocul Pharmacol Ther* 2009;23:145-152. [PubMed]170. Thorne JE, Anhalt GJ, Jabs DA. Mucous membrane pemphigoid and pseudopemphigoid. *Ophthalmology* 2004;111:45-52. [PubMed]Page 2Click on the image to see a larger version.

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