
CONJUNCTIVITIS

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ABSTRACT

Conjunctivitis is also called pink eye or Madras eye, it is the inflammation of the outermost layer of the white part and inner surface of the eyelid. It makes the eye appear pink or reddish. It causes pain, burning, scratchiness, and itching. The conjunctiva is a thin mucous membrane present on the ocular surface.

Keywords: Conjunctivitis, Photophobia, Redness Of Eye.

I. INTRODUCTION

Conjunctivitis is commonly known as red eye because of its clinical feature in which it causes reddish or pinkish inflammation of certain parts of the eye such as the eyelids and the outermost part. It severely causes itching of the eye. Viruses are basically the most common cause and other allergies to pollen, cosmetics, and irritants such as chlorine and smoke.

Parts of the Conjunctiva

The conjunctiva is divided into three parts which are the following:

1. Bulbar conjunctiva
2. Conjunctival fornix
3. Palpebral conjunctiva

Conjunctival Fornix

Conjunctival Fornix can be divided into 4 parts which are as follows:

1. Superior (it is the deepest)
2. Lateral
3. Medial
4. Inferior

Giant Fornix syndrome, generally seen in old age, is a condition with a voluminous superior fornix.

Palpebral Conjunctivitis: The palpebral conjunctiva extends from the mucocutaneous junction to the covering of the tarsal plate. There are four types of palpebral conjunctiva which are as follows:

Marginal (2mm) Tarsal

- Orbital

Sulcus sub tarsalis. Important Information • When a foreign body gets stuck in the sulcus sub tarsalis, it requires double eversion of the lid, which can be done by the equipment known as the Desmarres.

Bulbar Conjunctiva: Bulbar conjunctiva covers the whole anterior sclera till the limbus but it doesn't cover the cornea. At the limbus, it joins with the tenon's capsule and episclera and ridges are created due to this fusion. These ridges are called reti ridges. The space between two reti ridges is called the palisades of Vogt. The palisade of Vogt contains limbal stem cells.

Important Information

The conjunctiva has lymphatic drainage, with medial drainage to submandibular nodes and lateral drainage to preauricular nodes.

Sensory supply is provided by the 5th nerve.

Conjunctivitis

The condition where there is inflammation of the conjunctiva is known as conjunctivitis.

Signs

There are various signs which are experienced by patients suffering from conjunctivitis, which are as follows:

- Redness

Pain

Photophobia

Blepharospasm

- Discharge

Foreign body sensation

Types of Discharge :Depending upon the etiology of conjunctivitis, there can be different types of discharge which are discussed in the following sections. Bacterial-Muco purulent/Moderate purulent/Severely Purulent.

Chlamydial-muco purulent.

- Viral-watery in nature.

- Allergic conjunctivitis - watery.

Examination Findings

- Redness (Conjunctival congestion)

PATHOLOGY:

Types of redness

Pseudo-membrane• Ciliary congestion - When blood vessels near the limbus is congested which is draining directly from the limbus to the fornix. It is seen in corneal pathology, glaucoma and uveitis. Conjunctival congestion - If conjunctival vessels are inflamed.

- Pathologically conjunctivitis can be classified as:

Follicular This type of conjunctivitis is characterised by the aggregations of lymphoid cells. The maximum aggregation is observed in the fornix region. However, this aggregation happens in adenoid tissue, and this adenoid tissue develops after 2-3 months of age, therefore no follicles

in neonates.Papillary In this form of conjunctivitis, there is epithelial hyperplasia, along with accumulation

Clinical features

- Redness

Pain

- Photophobia

Blepharospasm

Discharge

Foreign body sensation

Treatment-Depends upon the bacteria causing conjunctivitis

Investigation

- Microbiologically staining

- PCR

- Immunofluorescence microscopy

- Biopsy

Allergic Conjunctivitis

Allergic conjunctivitis primarily manifests as itching and excessive watering of the eyes.

It can be acute, seasonal, or perennial allergic reactions.

The types of allergic conjunctivitis are vernal keratoconjunctivitis, atopic keratoconjunctivitis and phlyctenular keratoconjunctivitis.

Phlyctenular Keratoconjunctivitis

Allergy caused by endogenous antigens Staphylococcus aureus and tuberculosis infections.

It presents with watering and itching in the eyes.

II. EXAMINATION FINDINGS

Nodule of phlycten near the limbus and conjunctival congestion

- Involvement of the cornea leads to a fascicular ulcer, which later develops into a ring ulcer.

It is a type 4 hypersensitivity reaction → Treated with steroids.

For recurrent phlyctenular conjunctivitis associated with Staphylococcus blepharitis, treatment often involves the use of oral tetracycline or doxycycline.

Vernal Keratoconjunctivitis/Spring Catarrh

It is usually seen in summer season

It is a type 1 hypersensitivity reaction caused by exogenous allergens, such as pollen, dust, etc. Common in male children.

Keratoconus: Due to constant rubbing

Clinical features-Presents with itching, watering, andropy discharge containing macin

It does not develop follicular reactions but only papillary reactions.

Forms of Keratoconjunctivitis

Vernal Keratoconjunctival keratoconjunctivitis: palpebral, limbal, and mixed

Treatment

Antihistamines: Olopatadine and azelastine.

Mast cell stabilizer: Sodium cromoglycate and nedocromil sodium,

Antihistamines: Epinastine and bepotastine.

Topical steroids (mild): Fluorometholone & loteprodnel etabonate (given in non-responsive cases)

Acetylcysteine to dissolve mucus.

Atopic Keratoconjunctivitis

Common in temperate regions and winters.

Predominant in adults with no gender predilection.

Findings in Atopic Keratoconjunctivitis

Shield cataract (Anterior sub-capsular cataract) Dennie Morgan folds: Skin folds under the eyes due to excessiva rubbing.

Dennic Morgan folds.Madarosis: Loss of eyebrows and eyelashes. Hertoghe's sign: Loss of lateral one-third of eyebrows.

III. REFERENCES

- [1] <https://www.sciencedirect.com/science>
- [2] <https://colab.ws/articles/10.1016%2F0>
- [3] <https://www.researchgate.net/publicati>
- [4] <https://www.mdpi.com/2313-5786/3/3/11>
- [5] <https://www.slideshare.net/slideshow/anaphylaxis-33974367/33974367>
- [6] <https://www.sciencedirect.com/topics/neuroscience/immunoglobulin-e-receptor>
- [7] <https://www.up.ac.za/media/shared/Legacy/hpc%20files/galleries/SSMU/articles%20by%20units/anaphylaxis.zp38607.pdf>
- [8] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5630056/>
- [9] <https://labpedia.net/ige-antibody-level-allergy-blood-testing>