Characteristics of measles keratoconjunctivitis in adults


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Introduction. Measles (lat. morbilli) is an acute anthroponotic infectious virus disease with a high contagion level. In general, measles is common for children. However, there are a good number of the diseased among adults. A clinical picture of measles in adults is characterized by more intensive symptoms and by more likely development of complications.

Purpose. To analyze the clinical course of measles keratoconjunctivitis in adults.

Materials and Methods. In 2017, we followed up two patients (aged 34 and 42) having had measles with an atypical disease course. Both patients were diagnosed bilateral conjunctivitis and superficial punctate keratitis. Dry eye syndrome was moderate. The patients were performed anti-inflammatory, antiviral, desensitizing and substitutional therapy. 3 days after treatment onset, the patients' complaints decreased and biomicroscopy findings were improved. At Day 7, the subjective complaints and clinical signs almost disappeared.

Conclusion. The course of measles in adults is of particular severity. Measles keratoconjunctivitis is characterized by punctuate eruption in the cornea and pronounced dry eye syndrome. Early therapy enabled to regress the process and to recover the vision within a short period of time.

Key-words: keratitis, measles, keratoconjunctivitis, epitheliopathy
Materials and Methods

In 2017, we followed up two patients (aged 34 and 42) having had measles with an atypical disease course. While being treated at infectious diseases hospital for measles, both patients were diagnosed keratoconjunctivitis. Measles developed with extensive cutaneous eruption (Figure 1).

Results

Upon discharge from infectious diseases hospital, on the same day, both patients were admitted to Corneal Pathology Department of the Filatov Institute of Eye Diseases and Tissue Therapy with complaints of photophobia and foreign body sensation in both eyes. As told by the patients, the complaints were gradually increasing since enanthesis appeared on the face. Beginning from the second day at infectious diseases hospital, both patients were prescribed okoferon instillations four times a day.

At admission to Corneal Pathology Department, both patients were diagnosed bilateral conjunctivitis and superficial punctate keratitis (Figures 2, a, b). Dry eye syndrome was moderate.

Biomicroscopy revealed the changes as follow: conjunctival hyperemia, single hemorrhages; the corneal surface was rough and fluorescein penetrated in the form of epitheliopathy; in the optic zone, the cornea at subepithelial levels was fluorescein stained as numerous punctuate (0.1mm) infiltrates; a smooth swelling was noted in the stroma.

The patients were performed anti-inflammatory, antiviral, desensitizing and substitutional therapy which included: 0.02% chlorhexidine instillation, okoferon (interferon alfa-2b), 2% ectoin, thiotriazolinum, hylo care four times a day; ganciclovir gel five times a day; at later terms, dexamethasone; parabulbar injections: heparin, thiotriazolinum, and dexamethasone; intramuscular injections: 1 mln laferobion (interferon alfa-2b), non-steroidal anti-inflammatory agents, desensitizing agents, vitamins.

At 3 days after treatment onset, the patients noticed state improvement and significantly reduced photophobia. Biomicroscopy revealed a reduction of conjunctival hyperemia, corneal epitheliopathy with the poorly fluorescein penetrated corneal surface, as well as a resolution of subepithelial punctuate infiltrates. The stromal swelling was resorbed.

At Day 7, the subjective complaint disappeared (photophobia, foreign body sensation). Biomicroscopy showed mild conjunctival hyperemia; subconjunctival hemorrhages were resolved; the corneal surface was smooth and epithelized. Subepithelial punctuate infiltrates were resorbed. The stroma was transparent. Visual acuity increased to 1.0.

The recommendations as follow were given: antiseptic agent instillations four times a day (boric acid solution, chlorhexidine solution, miramistin solution); interferon alfa-2b (okoferon) 4-6 times a day; tear substitutes 4-6 times a day (hylo-care, hylo-comod, 0.21 % optinol, Thealoz Duo); nutritional vitamin drops four times a day (sensivit, lacrisek, thiotriazolinum); overnight repairing agents (corneregel, solcoseryl).

Conclusion

The course of measles in adults is of particular severity. Measles keratoconjunctivitis is characterized by punctuate eruption in the cornea and pronounced dry eye syndrome. Early therapy enabled to regress the process and to recover the vision within a short period of time.

References

Fig. 1. Extensive skin rash with measles

Fig. 2. Conjunctivitis and superficial punctate keratitis in patients with measles