

TACTICS OF MANAGEMENT OF PATIENTS WITH KERATITIS AND PURULENT CORNEAL ULCERS ASSOCIATED WITH WEARING CONTACT LENSES

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<https://doi.org/10.5281/zenodo.7178516>

Abstract. Every year the number of patients with various types of refractive errors increases, which leads to the popularization of contact vision correction. There are more than 140 million people in the world who use soft contact lenses, the average age of soft contact lens users is 25 years. The use of a soft contact lens reduces the phenomena of visual fatigue, increases visual performance.

Keywords: patient, correction, lenses, soft contact.

ТАКТИКА ВЕДЕНИЯ БОЛЬНЫХ КЕРАТИТОМ И ГНОЙНОЙ ЯЗВОЙ РОГОВИЦЫ, СВЯЗАННОЙ С НОШЕНИЕМ КОНТАКТНЫХ ЛИНЗ

Аннотация. С каждым годом увеличивается количество пациентов с различными видами аномалий рефракции, что приводит к популяризации контактной коррекции зрения. Мягкими контактными линзами пользуются более 140 миллионов человек в мире, средний возраст пользователей мягких контактных линз составляет 25 лет. Использование мягких контактных линз снижает явления зрительного утомления, повышает зрительную работоспособность.

Ключевые слова: пациент, коррекция, линзы, мягкий контакт.

INTRODUCTION

Every year the number of patients with various types of refractive errors increases, which leads to the popularization of contact vision correction. There are more than 140 million people in the world who use soft contact lenses, the average age of soft contact lens users is 25 years. The use of a soft contact lens reduces the phenomena of visual fatigue, increases visual performance.

MATERIALS AND METHODS

At the same time, only 3% of soft contact lens wearers diligently follow the rules of their use. Unfortunately, even the most perfect lenses are a foreign body to the eye and can cause a number of complications. Contact correction is considered as one of the leading risk factors for the development of keratitis along with injuries. These keratitis are separated into a separate group – keratitis associated with wearing soft contact lenses.

According to the literature, from 9 to 40% of all bacterial keratitis is associated with wearing soft contact lenses. Among soft contact lens wearers, the incidence of bacterial keratitis is 0.02–0.2%, remaining stable for many years. The ophthalmological clinic annually treats patients with a variety of inflammatory eye pathology. Their structure includes 200-230 patients with inflammatory pathology of the cornea. Bacterial and viral keratitis occupy a significant place in the structure of keratitis (approximately in an equal ratio). Among the causal factors provoking their occurrence, a significant proportion are foreign bodies of the cornea, microtrauma. In recent years, cases of keratitis formation caused by errors in wearing soft contact lenses have begun to attract attention. Therefore, it seemed appropriate to analyze the frequency of occurrence of keratitis in patients who use soft contact lenses for a long time on their own clinical material.

To analyze cases of severe keratitis and corneal ulcers associated with wearing contact lenses and develop optimal management tactics for such patients.

For 2 years, 42 cases (46 eyes) of severe keratitis and corneal ulcers were traced in contact lens wearers, which accounted for about 8% of all cases of keratitis and corneal ulcers according to our clinic. The average age of patients was 30 years (from 16 to 46 years). Visual acuity at admission: 0,3–1,0 – 16 eye; 0,01–0,2 – 23 eye; light perception with correct projection – 8 eyes, light perception with incorrect projection – 1 eye. The management of such patients was carried out on the basis of the developed tactics:

1. Active antimicrobial therapy (2-4 weeks). A combination of antimicrobial drugs from 2 to 4 types (2 of them are antibiotics of different groups). With the progression of the process and/or the threat of perforation, surgical treatment was performed with an organ-preserving purpose: integumentary keratoplasty according to Kuntu, blepharography.

2. In the reparative (recovery) period (1-2 months), emphasis is placed on the use of high viscosity drugs (gels, ointments) in combination with corticosteroids.

3. In the rehabilitation period (1-3 months) – preparations of artificial tears of low viscosity were used.

The follow-up period of patients ranged from 1 to 6 months.

RESULTS

In 32 cases, the occurrence of an infectious process was associated with a violation of the recommended rules for wearing and caring for contact lenses. In 25 eyes, the disease occurred after contact lenses were worn for a long time, in 11 – after one-day contact lenses, only 1 patient had hard contact lenses, in 9 patients the type of contact lenses was unknown.

DISCUSSION

The average treatment day was 150 ± 9 days (from 4 to 44 days). Against the background of treatment in 37 cases, visual acuity reached 0.3–1.0; in 4 – 0,01–0,2 ; in 3 – light perception with the correct projection, in one case, a patient with the formation of a corneal perforation underwent surgical treatment. Enucleation was not required in any case. In almost all cases, persistent corneal opacity of varying severity in the affected area was formed in the outcome.

CONCLUSIONS

The leading cause of the disease (at least in 2/3 of cases) was a violation of the recommended rules for wearing and caring for contact lenses. Severe cases of corneal ulcers and keratitis in contact lens wearers require urgent and maximally vigorous inpatient treatment. Recommended tactics for managing patients with infectious diseases of the cornea while wearing contact lenses, which allows in all cases to achieve complete relief of the infectious process, preserve visual functions and reduce the frequency of surgical interventions.

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