



## "DIAGNOSIS AND TREATMENT OF ADENOVIRUS CONJUNCTIVITIS IN AMBULATORY CONDITIONS"

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### Annotasiya

Epidemik kon'yunktivit (EK) adenovirus infeksiyasidan kelib chiqqan ko'z shilliq qavatlarining tez-tez uchraydigan o'ta yuqumli kasalligi bo'lib, uning epidemiyasi katta iqtisodiy yo'qotishlarga, shu jumladan bemorlarning vaqtincha nogironligi tufayli va ba'zi hollarda ko'rishning doimiy pasayishiga olib kelishi mumkin.

**Maqsad:** Adenovirusli kon'yunktivitni ambulator sharoitda davolashda Virostav preparatini qo'llab, uning samaradorligini baholash.

**Materiallar va usullar:** RIKMIATM Buxoro filialida ambulator ravishda davolangan adenovirusli kon'yunktivit (AVK) bilan kasallangan 18-57 yoshdagi 46 nafar bemor kuzatuv ostiga olindi. Bemorlardan 43 nafari adenovirusli kon'yunktivit, 3 nafari esa adenovirusli keratokon'yunktivit bilan kasallangan.

**Xulosa:** Adenovirusli kon'yunktivit bilan og'rigan bemorlarni kompleks davolashda virostav preparatini qo'llash shox parda epitelizasiyanishini tezlashtirishga yordam berdi. Bemorlarni davolash vaqtini 4-5 kunga qisqartirdi. Virostav preparatini qo'llash adenovirusli kon'yunktivit uchun xavfsiz va samarali davolash usuli hisoblanadi.

**Kalit so'zlar:** adenovirusli kon'yunktivit, idoxuridin, kortikosteroidlar, interferon induktorlari, diagnostika, davolash.

### Аннотация

Эпидемический конъюнктивит (ЭК) - частое высокоинфекционное заболевание глазной поверхности, вызываемое аденовирусной инфекцией, и его эпидемии наносят большой экономический ущерб, в том числе временную нетрудоспособность больных, а в ряде случаев - потерю зрения, могут привести к стойкому снижению.

**Цель:** Повышение эффективности амбулаторного лечения аденовирусного конъюнктивита с включением в терапию препарат Виростав.

**Материал и методы:** Под наблюдением находилось 46 больных в возрасте 18-57 лет с аденовирусным конъюнктивитом (АВК), находящихся на амбулаторном лечении в Бухарском филиале РИКМИАТМ. У 43 из них был аденовирусный конъюнктивит, у 3 - аденовирусный кератоконъюнктивит.

**Выводы:** В комплексном лечении больных аденовирусным конъюнктивитом применение препарата Виростав способствовало ускорению эпителизации роговицы. Это сократило сроки лечения больных на 4-5 дней. Применение Виростава является безопасным и эффективным методом лечения аденовирусного конъюнктивита.

**Ключевые слова:** аденовирусный конъюнктивит, идоксуридин, кортикостероиды, индукторы интерферона, диагностика, лечения.

### Abstract

Epidemic conjunctivitis (EC) is a frequent highly infectious disease of the ocular surface caused by adenovirus infection, and its epidemics cause great economic losses, including temporary disability of patients and, in some cases, loss of vision. can lead to a permanent decrease.

**Target:** Improving the efficiency of ambulatory treatment of adenoviral conjunctivitis with the inclusion of Virostav in therapy.

**Materials and methods:** 46 patients aged 18-57 years with adenovirus conjunctivitis (AVK) treated on an outpatient basis at RIKMIATM Bukhara branch were observed. 43 of them had adenovirus conjunctivitis, 3 had adenovirus keratoconjunctivitis. The most important thing is the effectiveness of the drug under consideration in the treatment and prevention of viral eye diseases, primarily viral conjunctivitis.

**Conclusions:** In the complex treatment of patients with adenovirus conjunctivitis, the use of Virostav drug helped to accelerate corneal epithelization. It reduced the treatment time of patients by 4-5 days. The use of Virostav is a safe and effective treatment method for adenovirus conjunctivitis.

**Key words:** Adenovirus conjunctivitis, idoxuridine, adenovirus, corticosteroids, interferon inducers, diagnosis, treatment.

### Relevance

Epidemic conjunctivitis (EC) is a highly contagious disease of the mucous membrane of the eye caused by adenovirus infection. can cause permanent hair loss. Damage to the surface of the eye by adenovirus is the most common cause of "red eye" in the population of different countries of the world [1]. Among infectious conjunctivitis, the frequency of adenovirus conjunctivitis, according to the literature, ranges from 15 to 70% [1, 2]. More than 40% of patients who turn to an ophthalmologist on an outpatient basis have inflammatory diseases of the eye, up to 80% of temporary incapacity for work due to eye diseases. more than 50% of the above patients may need inpatient treatment. Conjunctivitis is the main part of inflammatory eye diseases, including viral (adeno-, herpes-, entero-), bacterial and allergic conjunctivitis.

### The goal

Evaluation of the effectiveness of Virostav drug in outpatient treatment of adenovirus conjunctivitis.

### Materials and methods

46 patients aged 18-57 with adenoviral conjunctivitis (AC) treated on an outpatient basis at The Republic's Specialized Eye Microsurgery Scientific-practical Medical Center, Bukhara branch Bukhara branch were observed. 43 of the above patients had adenovirus conjunctivitis, and 3 had adenovirus keratoconjunctivitis. Average age ( $M \pm m$ ) -  $38.2 \pm 1.1$  years. Patients under control were divided into 2 groups, the main group - 23 patients (41 eyes); control group - 23 patients (36 eyes). The groups were compared according to gender, age, and clinical manifestations of the disease. The main indicators for assessing the level of adenovirus conjunctivitis were the patient's complaints, the condition of the conjunctiva and separation, corneal clarity and visual acuity. Virostav eye drops were administered to patients in the main group along with traditional treatment. Patients in the control group received only traditional treatment. (immunocorrective, anti-inflammatory, desensitizing agents). It was taken as the criterion of effectiveness of the treatment, ensuring the shortening of the period of clinical recovery of this category of patients. Including clinical manifestations such

as detachment from the conjunctival cavity, swelling of the conjunctiva, infiltrates in the subepithelial layer, and a decrease in visual acuity caused by the disease.

The chemical structure of Virostav drug - idoxuridine molecule is very close to thymidine, one of the four main components of DNA, which allows it to integrate into viral DNA and disrupt its activity. According to the mechanism of action, it belongs to the group of nucleotide analogues. Virostav is a combined drug containing antiviral and immunomodulating agent - human recombinant interferon alpha-2b and antihistaminic agent - diphenhydramine.

## Results

Patients applied to the hospital with complaints of pain, feeling of a foreign body in the eye, and tears coming from four days to two weeks from the onset of the disease. At first, the disease was observed in one eye, and after 3-5 days in the second eye. Cases of sore throat, cough, runny nose were also observed. In addition, swelling of the eyelids, hyperemia of the conjunctiva of the eyelids, swelling of the lower transitional fold of the eyelid, petechial hemorrhages and enlargement of the follicles were observed. Almost all patients had swelling of the pre-auricular lymph nodes. If necessary, visual acuity of the patients was checked, biomicroscopy of the anterior segment of the eye, intraocular pressure (IOP) was measured once a week. In the dynamics of treatment of 46 patients (77 eyes) with adenovirus conjunctivitis, regardless of the treatment regimen (in both groups), a significant ( $p < 0.001$ ) regression of the main clinical manifestations of the disease was observed. It should be noted that the intensity of clinical manifestations of adenoviral conjunctivitis, such as eyelid swelling, mucosal hyperemia, and subconjunctival hemorrhage, significantly decreased in patients in the main group compared to patients in the control group ( $p < 0.05$ ). Patients in the control group received only traditional treatment. Complete recovery was observed in 43 patients after the prescribed treatment (there were no relapses). In 3 patients, after the period of exacerbation of the disease, the subepithelial layer of the cornea remained cloudy, after 3 weeks, the patient's visual acuity decreased to 0.4. Based on the schedule Dexamethasone 0, 1% solution 3 times a day, Virostav eye drops 5-8 times a day, Bivokha eye drops 1 drop 3 times a day, Dep - 1 eye drop 4-6 times a day. After 2 weeks, the haze in the subepithelial layer of the cornea disappeared, but a small amount of infiltrates remained. Based on the schedule, Dexamethasone 0.1% solution, Dep - 1 eye drop continued 3 times a day. After 6 months, the patient's complaints almost disappeared. The visual acuity of both eyes improved to 0.9. The eyes are calm. There are few granular subepithelial opacities in the cornea. There were no recurrences during the past year. After treatment, the visual acuity of the patients was restored to 1.0. Thus, the use of Virostav drug in outpatient treatment of patients with adenovirus conjunctivitis, helped to significantly improve clinical indicators, increase visual acuity after treatment, and shorten treatment days. In all clinical groups of patients, the use of the drug did not cause toxic or allergic reactions or serious complications.

## Conclusions

1. First of all, the most important, in the treatment and prevention of adenovirus conjunctivitis, it is important that the drug under consideration is effective, affordable, and a local drug.
2. In the complex treatment of patients with adenovirus conjunctivitis, the use of Virostav helps to accelerate corneal epithelization. Reduces the treatment time of patients by 4-5 days.

3. The use of Virostav is a safe and effective treatment method for adenovirus conjunctivitis.

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