



5-FU and betamethasone), maximum of four times during first 3 months. A 30-gauge needle was passed 2 to 3 mm from the edge of bleb, underneath the conjunctiva, and parallel to the scleral plane. 5 mg (0.1 ml) 5-FU and 0,1 ml betamethasone (Diprospan) were injected around the newly created bleb. The assessment criteria include: levels of IOP reduction from baseline without/with medication, rate of repeat needling or further surgery within the 1-year follow-up. All patients were followed 1 day, 1 week, 1 month, 3 months, 6 months, 9 months, and 12 months after surgery. The minimal follow-up period after needling was 12 months.

There was no significant difference in IOP between groups in the first 6 months after needling. The mean postneedling IOP was 13.83 ± 4.14 mm Hg, which was significantly different from the preneedling IOP. In 12 months IOP <21 mm Hg without topical hypotensive drops was observed in 70% of patients after needling with 5-FU and betamethasone, and in 42.9% of eyes after needle revision. We performed needling procedures at a mean of 1.83 needlings during 1 year with 5-FU and betamethasone per eye, and 3.21 needlings in group without application 5-FU and betamethasone. The overall success rate of needling procedures with 5-FU and betamethasone was 85%. There was no correlation between the number of 5-FU and betamethasone needle revisions and postneedling IOP reduction. In 12 months repeat filtration surgery was performed in 2 eyes (10%) in 5-FU and betamethasone needling group and in 4 eyes (28.6 %) in needling group without 5-FU and betamethasone application.

So, as conclusion, we can suggest that early needling with 5-FU and betamethasone could significantly prolong the survival time of the filtering bleb in 1-year-follow-up as compared with that without 5-FU and betamethasone application.

Kozariychuk N.Ya.

APPROACHES TO RECURRENT META-HERPETIC KERATITIS THERAPEUTIC TREATMENT

*B.L. Radzikhovskiy Department of Ophthalmology
Bukovinian State Medical University*

Meta-herpetic corneal disease is considered as a chronic or chronic recurrent superficial post-herpetic corneal inflammation without any detectable HSV-1-activity. Meta-herpetic keratitis is described as a structural damage by the immune and inflammatory mechanisms as a consequence of HSV-1 corneal infection (Liesegang, T.J. 1999). Meta-herpetic erosion, ulcer and bullous keratopathy are the main types of meta-herpetic corneal disease. Stromal keratitis is often presented with eye pain and blurred vision.

The objective of the study is to evaluate the steps in the therapeutic approach to meta-herpetic corneal ulcer. The 6 months of the follow-up results of the case were determined.

Case report: 51-year-old male was admitted with the symptoms of tearing, photophobia, redness and blurred vision in the left eye. He had a history of right recurrent HSV-1 epithelial keratitis in the last 2 years. He had been treated with only topical antiviral medications. The last episode of HSV-1 epithelial keratitis occurred 4 months ago. Visual acuities on admission were 0.01 in the left eye and 1.0 in the right eye. Biomicroscopic examination of the left eye found a centrally located deep corneal ulcer with smooth edges associated with stromal inflammation and descemet folds. Biomicroscopic examination of the right eye and fundus examination of both eyes were normal. The intraocular pressures by Maklakov tonometer were 19 mm and 18 mm Hg respectively. The corneal scraping specimens for bacterial and fungal cultures were negative. The patient was diagnosed with meta-herpetic corneal ulcer in the left eye.

The basic principle of therapy for this disease is rapidly to heal the epithelial defect. Methods to accomplish this include stopping toxic medications use, performing punctal occlusion, instilling tear film supplements, fitting a bandage contact lens, tarsorrhaphy, and in case of significant underlying inflammation, use of topical corticosteroids cautiously while watching carefully for corneal melts.

The treatment tactics includes valacyclovir 500 mg three times a day, fibronectin drops prepared from the patient's serum, vitamin C, vitamins group B, and dexpahtenol. Biomicroscopic



examination at the 2nd week of follow-up found healing of corneal ulcer, decrease of stromal inflammation with the resolution of descemet folds. Patient's examination at the 6th month of treatment determined an increase in VA of the left eye to 0.2.

The most important findings were that topical corticosteroids use shortened the course of stromal keratitis, but did not alter the final outcome, and prophylactic treatment with oral valacyclovir decreased the risk of recurrent ocular infection 41%. Valacyclovir 1000 mg twice a day is found to be as effective as acyclovir 200 mg five times a day (Perry, C.M., Faulds, D.1996). Deep central corneal ulcer and peripheral corneal neovascularization were resolved with this treatment at the end of the 6th month.

Therefore, as conclusion, we recommend early initiation of systemic antiviral therapy in combination with a proper use of topical steroids, vitamin C, vitamins group B, dexpahtenol and fibronectin eye drops.

Kuchuk O.P.

MANAGEMENT OF PATIENTS WITH DEMODEX BLEPHARONCONJUNCTIVITIS

*B.L. Radzikhovskiy Department of Ophthalmology
Bukovinian State Medical University*

The cause of parasitic blepharoconjunctivitis is ticks of the genus Demodex - opportunistic pathogens (present in 90% of the adult population). Asymptomatic carrier of the parasite is possible. However, in conditions of reduced immunity, under the influence of adverse external conditions and internal factors - diseases of the nervous, vascular, endocrine and digestive systems, metabolic disorders, demodicosis occurs. The tick parasitizes in the ducts of the sebaceous, meibomian glands and hair follicles. Only drug therapy of demodicosis is ineffective, as only the most superficial ticks die.

We use a comprehensive approach to the treatment of demodicosis blepharoconjunctivitis by sequential application of Spregal or Stop demodex gel on the skin of the eyelids and subsequent darsonvalization of the eyelids. The drugs should be applied to the front edge of the eyelids using an ear stick, without getting on medicine on the mucous membrane of the eye.

The method of darsonvalization has the following therapeutic effects: acaricidal and bactericidal - due to the action of spark discharge and ozone generated in the near electrode space of the apparatus for darsonvalization; analgesic and antipruritic effects - by increasing the sensitivity threshold of pain and tactile exteroceptors; immunostimulating effect also due to the action of a spark discharge, which stimulates phagocytosis, and the release of biologically active substances that stimulate the humoral part of the immune system.

Using this technique in the period 2012-2019, we treated 50 patients using gel "Stop demodex" and 48 patients using Spregal. The course of darsonvalization with the specified means lasted 10 days with the subsequent break for two weeks and repeated carrying out. This treatment regimen corresponds to the full life cycle of the mite (15 days), as all treatments work only on adults ticks. Itching, swelling and redness of the eyelids after the first course of treatment decreased in 96.6% of patients using Spregal. If at primary eyelash microscopy in the microscope slide revealed 8-16 ticks in the field of view, then after the first course of treatment with Spregal their number decreased to 1-2 in the field of view. After re-treatment, the percentage of negative microscopic eyelash tests approached 100%. Almost similar data were obtained when combining darsonvalization with topical use of gel "Stop demodex".

We associate a good therapeutic effect with using of darsonvalization of the eyelids, which ensures the contact of specific agents with the maximum number of parasites, even deep ones. In our opinion, the spark charge, due to the action on smooth muscle cells of meibomian and sebaceous glands, stimulates the release of their secretion together with the demodex mite, which is exposed to specific drugs previously applied to the skin.

To prevent recurrence of exacerbations of the disease, we recommend daily regular therapeutic eyelid hygiene. For this purpose it is necessary to carry out self-massage of eyelids about 1-2 minutes after a warm compress. Thermal procedures help to improve local metabolic