

Comparative analysis results of izatizon application during the outpatient treatment of eye viral diseases.

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Izatizon belongs to the group of preparations with minimal toxicity and high specific activity. Significant antiviral effect achieves due to DNA, RNA and viral protein blockages that neutralize their reproduction and virulence.

We have applied Izatizon on an outpatient basis in form of 25% oil solution (one part of the preparation solved in the three parts of refined oil). Application method – ready solution instillation in two drops to the affected bulbar conjunctiva. Periodicity is 6-8 times a day.

Patient group comprised 35 persons, mainly of the middle age with viral eye pathology. 55 eyes were treated in this group. Five patients, from the whole quantity, asked for help after insufficient treatment by the regular antiviral preparations. In one case we have observed and treated a person with viral inflammation of the right Gasser's ganglion and viral keratoconjunctivitis of the right eye. Izatizon was prescribed him for the eye treatment according to the above mentioned scheme and we also recommended compresses and greasing with Izatizon in the eruption area on the forehead. As a result we have observed condition improvement in two days with further epithelization without keratoleukoma and significant eruption decrease on the skin. This treatment has finished with full recovery.

In case of ulcerous viral keratitis (one case was determined) the treatment was carried out with Izatizon without cryoapplication. Recovery has come without eye nebula. Once we have observed the relapse of treated eye (later we found out that this patient has violated the medical treatment schedule). Two patients were away so we weren't able to study them till the end of the treatment process, but we have already registered their condition amelioration on the third day since the beginning of Izatizon cure. One patient has refused from the preparation installation after the first try over strong pain he felt.

Practice has shown that treatment effectiveness depends on the viral form of nebula or conjunctiva and also on the period of patient visit. Persons that appealed late for medical aid (on 3-5 day since the disease started) and the inflammation process was in acme their treatment period was longer than usual.

Improvements came generally in 3,3 days after the cure start. Average disable duration – 7,5 days, pain syndrome disappearance – from 1 to 2 days, after the full recovery visual acuity restored till the initial level. Keratoleukoma wasn't observed after the recovery. Our experience shows that for the full medical course patient uses 3,0-5,0 ml of prepared preparation. During the eye viral diseases we have applied Izatizon as a basic preparation together with furacilin (1:5000) and sulfacetamide (30%) solutions in two drops 6-5 times a day.

During izatizon treatment the allergic manifestations haven't been noticed. The main preparation defect that our patients indicate as well as author who has tried it himself, is the strong burning during the first several seconds after instillation.

According to the literature, such preparations are used to cure viral diseases in ophthalmology: iduxoridin, phlorenal, tebropfen, bonaphton, poliakrylamid.

Iduxoridin-5 iodine-2-desoxsiuridin (IDU) – it enters into the DNA and leads to the base albumen creation that for it's part interrupts viral replication; influences actively on the pox and herpes viruses. In case of dendriform keratitis, if IDU is applied as eye medicated film than cornea epithelization occurs in 4-10 days period. If the preparation is applies as drops this

process takes from 7 to 15 days. Recovery during superficial keratitis comes in 60-90% of cases and during stromal – in 20-30%. Along with this, IDU has some negative characteristics:

- It ruins at room temperature and becomes toxic;
- It has frank cytostatic action on the cornea epithelium;
- It during its application viral persistence to the preparation forms with comparative ease;
- It has high effectiveness only in cases of superficial viral keratitis;
- It has low effectiveness or ineffective in cases of deep keratitis and uveitis;
- It has toxic and allergic action on the cornea (acute allergic conjunctivitis, filamentary keratitis, microanus, stromal cornea ulcer).

For these reasons it is not recommended to apply preparation more than 10 days without a break.

Florenal-bisulfate junction 2-florenonilglioxal. Exploitation form: 0,25-0,5% covering, 0,1% eye drops, 0,1% solution for underconjunctive injection. Florenal is characterized by high activity regarding flu pathogens. Ointment application effectiveness nearly corresponds to IDU. 71 patients from 73 with superficial keratitis have recovered. Average treatment length of ocular herpes during dendriform keratitis is about 14,2 days, during stromal keratitis – 22,1 days. Florenal therapeutic action enhancement is observed in complex with polyacrylamide which is an interferon inductor.

Tebrofen – 3,5,3`-5`-tetrabrom-2,4,2`,4`-tetraoxidifenil – shows high activity regarding flu viruses. It is insoluble with water and is used as 0,35 or 0,5% eye ointment. Tebrofen is effective only on the disease initial stages. It is useless during stromal keratitis. Tebrofen treatment scheme: eyes ointment is put to the conjunctival sac 3-4 times a day. Recovering is observed on the 12-th day.

Bonafton – 6-brom-1,2-oilkhenolin– shows high activity regarding herpes virus, it is used as 0,05% eye ointment. During bonafton treatment the recovery comes on the average 11,5-7,5 days. Patients had epitheliopation effects after 2-3 weeks of preparation application and they disappeared after its cessation. Treatment effectiveness has significantly risen during combined oral application.

In view of significant toxicity bonafton is recommended to apply during the grave viral process forms.

Poliakrylamid – more active during the superficial and ineffective during keratitis deep forms and is characterized by low toxicity and good tolerance.

Comparative table of the effectiveness of Izatizon and traditional preparations

Preparation name	Improvements since the beginning of the treatment, days	recovery		warnings
		Day from the beginning of the treatment	Percent from all patients	
+ IDU	4	10	Superficial process – 60-90% Stromal – 30%	To use not more than 10 days
+Floreal	3-4	14,2-superficial 22,1-stromal	71%	-
+Tebrofen	2-3	12-superficial	-	-
+PAA	7	10,4-superficial	-	-
+Bonafton	3-4	11,5-7,5	-	epitheliopathy
Izatizon	3,3	7,5	92%	-

From the above stated comparative review of popular antiviral ophthalmologic preparations (according to the literature data) and results received during the Izatizon viral eye pathology it is possible to admit such positive moments in favour of izatizon as:

- 1) preparation stability under application conditions;
- 2) absence of allergic manifestation;
- 3) no intoxication during the treatment;
- 4) evident medical effect in short terms (3,3 days) from the beginning of the treatment, weakening of the pain syndrome in 1-2 days;
- 5) relatively short average index of working capacity loss - 7,5 days;
- 6) all patients have reproduction of visual acuity to the prior indexes;
- 7) after recovery cornea epithelization passed without corneal caligo;
- 8) strong remission is observed after recovery;
- 9) small draught of ready preparation for the treatment course: 3,0-5,0 ml. 25% of Izatizon oil solution;
- 10) preparation long exposure on the mucoid and cornea due to its oil base.

As the defect of izatizon patients mention painful feelings during couple of seconds after preparation instillation to the conjunctival sac.

Wishes: practice with the preparation on an outpatients department have shown the appropriateness of izatizon application as 25% oil solution form in the glass or plastic vials 5,0 ml. volume and disposable dropper.

Literature

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