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COMPARATIVE ANALYSIS OF THE RESULTS OF TREATMENT OF PATIENTS WITH EYE BURNS

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ANNOTATSIYA

Kuyishlar ko‘zlarning eng og‘ir turlaridan biridir. Ular jiddiy tibbiy va ijtimoiy muammolarni anglatadi. Ularning barcha jarohatlari orasida ularning ulushi juda yuqori bo‘lib qolmoqda (38,4% gacha). Konservativ va jarrohlik davolash usullarini takomillashtirishiga qaramay, qurbonlarning 40 foizi nogiron bo‘lib qoladi. Adabiyotlarga ko‘ra, og‘ir ko‘zlar kuyganida, qurbonlarning 50 foizi nogiron bo‘lib qoladi va faqat ba’zilari o‘z ishlariga qaytishi mumkin. Ishning maqsadi - ko‘zni kuyish bilan og‘rigan bemorlarni davolash natijalarini qiyosiy tahlil qilishni o‘rganish. Materiallar va usullar: tashxis qo‘yilgan 96 ta bemor (185 ko‘z) ni tekshirdik: turli xil etiologyali ko‘zlar kuyishi. Xulosa: Shunday qilib, kuyishlar dinamikasining tahlili shuni ko‘rsadiki, Benzketazon bilan davolanish kasallanishning samaradorligi an’anaviy usul bilan muomala qilingan bemorlarga qaraganda ancha yuqori.

Kalit so‘zlar: ko‘z kyuishi, ko‘rish o‘tkirligi, epitelizatsiya, emoksipin.

ABSTRACT

Burns are one of the most severe types of eye damage. They represent a serious medical and social problem. Their proportion among all eye injuries remains extremely high (up to 38.4%). Despite the improvement of methods of conservative and surgical treatment, 40% of the victims become disabled.

According to the literature, with severe eye burns, 50% of the victims become disabled and only some of them can return to their work. The aim of the work is to study a comparative analysis of the results of treatment of patients with eye burns. Material and Methods: We examined 96 patients (185 eyes) with a diagnosis of eye burns of various origins (OH). Conclusion: Thus, the analysis of the dynamics of VA indicates that the effectiveness of the treatment of patients with the use of the drug benzketozone is higher than in the group of patients treated with the traditional method.

Keywords: eye burns, visual acuity, epithelialization, emoxipin

THE RELEVANCE OF THE WORK

Burns are one of the most serious types of eye injuries. It appears in everyday life and production for various reasons: physical (high temperature, radiant energy) and chemical (alkalis, acids, various chemically active substances and compounds). They cause serious medical and social problems. Among all eye injuries, their share remains very high (38,4% up to) . Despite improvements in conservative and surgical treatments, 40% of those affected remain disabled. Among them are mostly young, able-bodied people. The absolute number of local military conflicts, disasters, the worsening of the criminogenic situation, and the number of eye burn injuries is increasing. Eye burns represent serious injuries and occupy an important place among the damage to the organ of vision. During peacetime, patients suffering from eye burns make up 10-30% of all people admitted to hospitals with damage to the organ of vision. According to the literature, 50% of those affected by severe eye burns become disabled and only some can return to their work.

Purpose of work: to study the comparative analysis of the results of the treatment of patients with eye burns.

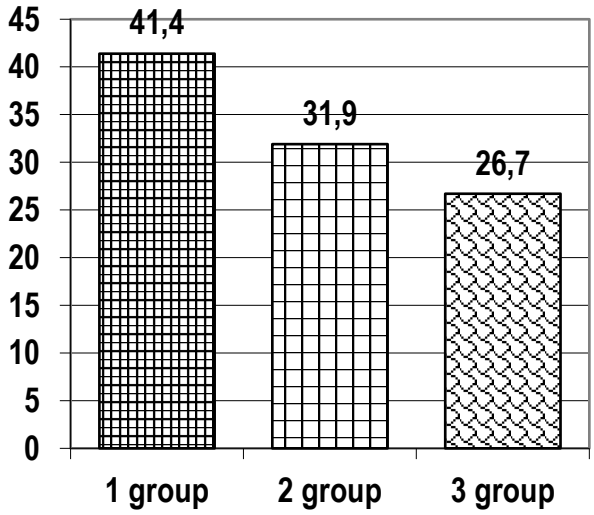
MATERIALS AND METHODS

We examined 96 patients (185 eyes) who were diagnosed with: eye burns of various origins, 30 patients - in the eye clinic "Dr. Miran" and 66 patients - the republican specialized scientific-practical eye in the Bukhara branch of the center of microsurgery.

The diagnosis of eye burn was made on the basis of anamnesis data, ophthalmological examination, as well as special diagnostic methods of research.

Industrial burns occurred in 63% of patients, and household burns in 37%. The time from the time of the burn to hospitalization varied from 1-2 hours to 5 days.

Depending on the type of burn lesion, patients were divided into 3 groups: group 1 included 38 patients (74 eyes) with thermal burns; the second group - 27 patients (43 eyes) - with a diagnosis of acid burns; the third group - 31 patients (62 eyes) with burns caused by alkali (Fig. 2.1).



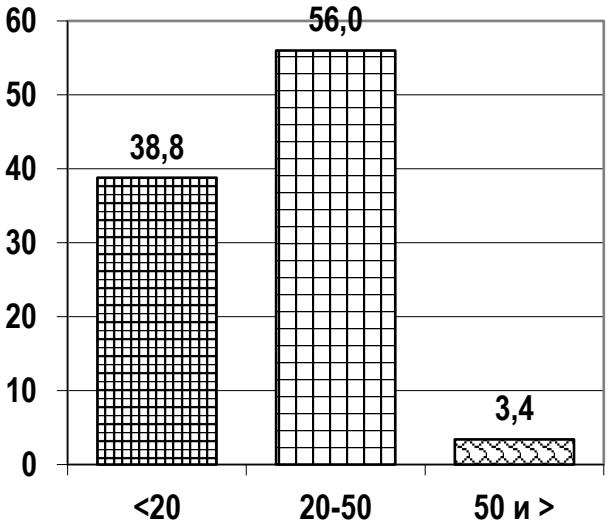


Figure 2.1. Distribution of patients by groups

Figure 2.2. Distribution of patients by age

The age of the patients ranged from 17 to 60 years, and the average age was 39 years. Sec. Distribution of patients according to age. 2.2, shows that the largest number of patients 65 (56.0%) are over 20 years old, 38.8% of patients are under 20 years old and 3.4% are over 50 years old

Table 1.

Distribution of Og patients by gender and age.

Sex	Age						Total	
	< 20		20-50		50 >			
	abs	%	abs	%	abs	%	Abs	%
A woman	12	31,1	14	27,7	3	50,0	29	30,2
Male	27	68,9	37	72,3	3	50,0	67	69,8

The distribution of patients examined with eye burns according to gender and age shown in tab. 1., shows that the majority of patients were 67 (69.8%).

Table 2.

Distribution of patients with eye burns according to the type and severity of burn injury.

Type of burn	Degree of burn (number of eyes)					
	I		II		III	
	abs	%	Abs	%	Abs	%
Thermal	39	45,7	14	25,5	31	28,7
Acidic	14	30,2	14	49,1	14	20,8
Calcareous	21	37,1	15	41,9	17	21,0

All patients were divided into 3 groups depending on the method of treatment after a comprehensive examination (with the participation of professional specialists) and after determining the treatment indicators.

The control group consisted of 38 patients (74 eyes). 29 of them (56 eyes) had I-II burns, 9 (18 eyes) had III burns. This group included traditional treatment:

a) a) with I-II degree: washing the conjunctival cavity with water with two turns of the upper eyelid; for re-epithelialization of the cornea - instillation of 5% ascorbic acid (2 drops 6 times a day for 2 days), sol. Thiotriozoline and 1% tetracycline ointment and 0.5% Fensulkal ointment in the conjunctival cavity (4 times a day);

b) in the III degree of burn injury, in addition to the above therapy, parabulbar injection of autokrov with an antibiotic once a day was prescribed.

1 main group consisted of 38 patients (74 eyes), with I-II degree burns in 27 patients (53 eyes) and III degree burns in 11 patients (21 eyes), who were also conventionally prescribed treatment, but instead of Fensulkal, 0.5% benzketozone ointment was used (laying into the conjunctival cavity 3 times a day).

2 main groups - 27 patients (43 eyes), 13 (16 eyes) of which with burns of the I-II degree and 14 (27 eyes) with burns of the III degree, the treatment of the 1 main group was 1% Emoxipin solution in the limbal region with 3, 6, 9 and 12 hours prescribed with beating.

The following clinical criteria were taken as the basis for determining the effectiveness of the recommended treatment methods: conjunctival hyperemia, corneal syndrome, peripheral swelling of the cornea, corneal epithelization time, recovery of limbal sensitivity and uveal events.

RESULTS

In 1 main group of patients, regeneration is characterized by acceleration of epithelization on the defect surface of the conjunctiva, cornea and ischemic limbal

zone, sensitivity is restored in this area. Epithelial defects with I and II degree burns were restored within 4-5 days (table. 3.).

Table. 3

Therapeutic effectiveness of complex treatment for eye burns in control and 1 main group (m, m).

Groups are the number of eyes		Groups are the number of eyes	Clinical recovery criteria		
			(time of days)	(time of days)	(time of days)
K	I-II	56	7,3±0,17	7,4±0,13	7,5±0,19
	III	9	9,3±0,26	9,6±0,36	9,4±0,33
1	I-II	53	6,2±0,18***	2,4±0,15***	2,7±0,14***
	III	21	7,0±0,58***	5,0±0,58***	4,7±0,88***

Groups are the number of eyes		Groups are the number of eyes	Clinical recovery criteria			Clinical recovery criteria
			(time of days)	(time of days)	(time of days)	
K	I-II	56	7,5±0,17	7,3±0,13	7,5±0,13	8,6±0,23
	III	9	9,2±0,58	9,1±0,23	9,5±0,36	10,3±0,36
1	I-II	53	5,8±0,19***	2,3±0,47***	6,3±0,67	6,3±0,76**
	III	21	6,2±0,58***	5,8±0,19***	7,8±0,29***	8,6±0,73*

Note: * - significant differences compared to control group data (*- P<0.05, * * - P<0.01, * * * - p<0.001)

In the third degree of burn, corneal defect filling with epithelium and restoration of the limbal zone occurred within 6-7 days.

With the increase in the regeneration of the cornea and limbal zone, the intensity of corneal syndrome, peripheral edema and clouding of the cornea decreased, the pain stopped for 2-3 days during burns of the I-II degree, and for 5-6 days with the III degree, this is due to the effect of benzethozone ointment. due to its analgesic properties.

Epithelialization acceleration events, conjunctival hyperemia and early disappearance of peripheral edema of the cornea helped to reduce the time of stopping uveal events (6-7 days in the I-II burn degree and 8-9 days in the III degree of the burn process) and hospital days (6.5-7.5 days and 8.5-9.5 days for I-II degree). with III degree burns).

The incidence of burn cessation was significantly different in patients in the control group who received standard treatment. Thus, with burn lesions of I and II degrees, epithelization events began on 7-8 days, and the defect was completely healed on 9-10 days. The remaining symptoms of corneal syndrome and burn inflammation stopped only for 7-8 days, the length of stay in the hospital was 8-9 days.

Active rejection of necrotic tissue on the surface of the cornea was not noted in 46 cases in this group of patients with III degree burns. Rejection of damaged tissue occurred randomly, so resorption of detritus was carried out along with lysis of intact areas of the cornea, which extended the epithelialization of the cornea and the limbal zone, as well as restored sensitivity. Epithelization was completed only in 10-11 days. At the same time, relaxation of the newly formed epithelium was observed, and perifocal edema persisted for 9-10 days. The length of stay in the hospital was 10-11 bed days.

Table 4.

Frequency of post-burn complications

Groups of patients		Post-burn complications							
		corneal ulcer		descemetocele		corneal perforation		iridocyclite condition	
		abs	%	abs	%	abs	%	abs	%
1 main	I-II	0	0	0	0	0	0	7	13,0
	III	6	37, 5	4	25	1	6,3	11	68,8
Control	I-II	14	28,0	9	18,0	6	12,0	23	46,0
	III	6	31,6	6	31,6	4	21,1	14	73,7

In 1 main group of I and II patients, corneal ulcer burn was not observed in any case, then in the control group this phenomenon was observed in 28.0% of cases (14 eyes). Iridocyclite events occurred in 13.0% (7 eyes) of the 1 primary group and a significantly higher rate of 46.0% (23 eyes) in the control group.

With III degree burns in the control group, corneal ulceration and descemetocele formation were observed in 31.6% of cases (6 eyes), corneal perforation in 21.1% (4 eyes), and iridocyclitis events in 73.7% of cases (14 eyes) the above complications are significantly less common in 1 main group.

In patients of the 1 main group, reducing complications of the organ of vision and shortening the time to stop the main symptoms of the burning process led to complete recovery of the cornea and its less obvious clouding.

Table 5.

Treatment results (n-number of eyes) in the main and control groups

All eye disease groups		Corneal condition	The condition of the cornea					
			transparent		Spot or cloud		Moderate degree of opacity	
			Abs	%	abs	%	abs	%
Main	I-II	54	24	44,4	21	38,9	9	16,7
	III	16	0	0	9	56,2	7	43,8
Control	I-II	50	20	40,0	17	34,0	13	26,0
	III	19	0	0	13	68,4	6	31,6

As can be seen from Table 5. turbidity in the form of a point or cloud was mainly observed in 34.0% and 26.0% of cases of I-II degrees and 68.4% of cases of III degree burns in patients of the control group. Against this background, in the main group of patients, complete recovery of corneal transparency was observed in 24 eyes (44.4%) in the I-II stage of the burn process, corneal transparency was noted in 40.0% of cases in the control group in the I-II degree of the burn process, and in both cases with III degree burns also in the group.

Initial visual acuity in the control group corresponded to the stage of the burn process and ranged from 0.5 to 0.5. Of these, visual acuity from 0.3 to 0.6 was recorded in 10 cases, from 0.07 to 0.1 in 20 eyes, from 0.01 to 0.06 in 23 eyes. No recovery of transparency was observed.

In 1 main group of patients, visual acuity was observed in 7 eyes of 0.3-0.6, 0.07-0.1 in 18 and 0.01-0.06 in 24 cases. Clinical and functional parameters improved significantly as a result of the treatment course in both groups.

Table 6.

Dynamics of visual acuity after the course of treatment of control and 1 main group patients

Treatment effectiveness		control group			1 main group		
		degree of burn			degree of burn		
		I n=32	II n=18	III n=19	I n=26	II n=28	III n=16
An increase of 0.01-0.09	abs	5	7	11	3	6	9
	%	15,6	38,9	57,9	11,5	21,4	56,3
An increase of 0.1-0.2	abs	11	7	7	7	8	5
	%	34,4	38,9	36,8	26,9	28,6	31,2
An increase of 0.3-0.4	abs	14	2	1	10	12	2
	%	43,7	11,1	5,3	38,5	42,8	12,5
Increase >0.4	abs	2	2	0	6	2	0
	%	6,3	11,1	0	23,1	7,2	0

According to our data, an increase in visual acuity was noted in all patients in the control and 1 main group with i and II degree burns, but still the indicators were significantly different. Thus, in 1 main group, an increase in oz by 0.1-0.4 occurred in 68.5% of cases, and in the control group in 68% of cases. An increase in visual acuity > 0.4 was noted in 14.8% of cases, compared to 8% in the control group. Such dynamics of visual acuity was not observed in any patient with III degree of burn injury. But despite this, the efficiency in group 1 is much higher (43.8%) than in the control group (42.1%).

Conclusion: thus, the analysis of the dynamics shows that the effectiveness of the treatment of patients using benzketazone is higher than that of the group of patients treated with the traditional method.

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