

factor of psychogenic influence on the person, depending on its features; with more pronounced disharmony they are more resistant and long lasting.

MATERIALS AND METHODS

We have studied the 153 patients (86 men and 67 women), aged between 20 and 68 years in the acute phase of burn disease and convalescence. Among the study in 65% of cases of severe thermal injury have been reported, 45%-were superficial burns, but with the defeat of the open areas of the body. In the acute phase, more common psychotic disorders, delirium acutum by type or other transient psychoses, especially in people abusing psychoactive substances, mainly alcohol. Delirious syndrome manifested in toxemia phase, at the height of the temperature of the reaction, was undulating in nature and went from 3-4 to 7-8 days.

RESULTS

In the complex treatment of these conditions are assigned psychotropic drugs, particularly neuroleptics, both classic and atypical. At all stages of the disease have been reported autonomic disorders, dissonnion phenomenon, disturbing and dysthymic disorder, partially stoped tranquilizers and antidepressants. In the later stages of the disease, mainly in young women against the background formed of hypertrophic and keloid scarring and deforming contractures, were post-traumatic stress reactions with varying degrees of psycho-social maladjustment: depressive symptoms with anxiety or anhedonia, decreased communication skills, which sometimes leads to suicide attempts. There were fears for their appearance, ability to work, loss of faith in recovery. In the process of biological regeneration therapy is constantly conducted, aimed at reducing the patient's frustration with respect to physical defects and his stay in the community.

CONCLUSION

Thus, for burn patients having mental disorders of different nature and level, which requires the inclusion of appropriate psychotropic drugs in general complex of treatment with mandatory psychotherapy at all stages of the disease.

KEYWORDS: Burns; post-burn mental disorders; post-burn dissonnion;

COLLAGEN/CHITOSAN HYBRID SPONGE AS A SCAFFOLD FOR CELL CULTURE



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The aim of this study is to obtain a three-dimensional collagen type I/chitosan scaffold for seeding the cells cultured *in vitro*, and promotion of cell adhesion and proliferation.

Materials and methods used to obtain a collagen I/chitosan hybrid scaffold were bovine tendons that after mincing have been processed with 0,05M Na₂HPO₄ solution for 4 days, followed by enzymatic digestion with pepsin 100 mg per 1gr. of tendon, EDTA and acetic acid for 24 hours at 4°C. Then collagen was purified by precipitation with 1.8 M NaCl, followed by acetic acid dissolution and dialysis in bags with 12000 Da pore size by a large volume of 0.02 M Na₂HPO₄ solution, until pH of collagen solution become neutral or weak base, then it was frozen at -60 °C and allowed to thaw at room temperature. Collagen is separated from the remaining liquid by centrifugation at 1000 g for 10 min. The obtained collagen is dissolved with acetic acid to a concentration of 1%, then freeze-dried (EVD-12; Unicryo MCL-60). Obtained sponge was treated with 0.25% chitosan solution for 24 hours, then washed with distilled water on a vibrator, frequently changing the water. After that the collagen/chitosan sponge is freeze-dried and cross-linked at room temperature in a vapor chamber with 12.5% glutaraldehyde (SERVA) for 24 hours.

Results:

Pore size in native collagen sponge vary between 50 and 200μ, but in the case of hybrid collagen/chitosan sponge, pore size vary between 30 and 100μ.

Conclusion

The obtaining method of a hybrid collagen/chitosan scaffold for cell seeding is effective. The sponge size and microscopic structure allow its utilisation in filling tissue defects and tissue engineering.

Keywords: collagen, chitosan, hybrid, sponge.

METHOD OF CHONDROCYTES ISOLATION FROM HYALINE CARTILAGE



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