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MEDICINE		
34.	Akhmedova N., Saydalieva F., Ibragimov A. FEATURES OF BIOCHEMICAL AND IMMUNOLOGICAL PARAMETERS IN CHILDREN WITH JUVENILE ARTHRITIS WITH SYSTEMIC ONSET	171
35.	Korolova Z., Korolova K. SKIN COMPLICATIONS AFTER SCLEROTHERAPY AND METHODS OF THEIR CORRECTION	175
36.	Vergeles T., Serheta I. PROGNOSTIC ASSESSMENT OF THE PECULIARITIES OF THE COURSE OF ADAPTIVE TRANSFORMATIONS THAT OCCUR IN THE MODERN STUDENTS, BASED ON THE DATA OF THE APPLICATION OF CLUSTER ANALYSIS PROCEDURES	178
37.	Гутченко О.А., Гутченко А.Г., Гутченко К.С., Бачинський А.О. АНАЛІЗ ПРОБЛЕМНИХ ПИТАНЬ УТОЧНЕННЯ ДОЗ ОПРОМІНЕННЯ ВІЙСЬКОВОСЛУЖБОВЦІВ – УЧАСНИКІВ ЛІКВІДАЦІЇ НАСЛІДКІВ АВАРІЇ НА ЧОРНОБИЛЬСЬКІЙ АТОМНІЙ ЕЛЕКТРОСТАНЦІЇ	181
38.	Драмарецька С.І., Удод О.А. ХАРЧОВІ ВПОДОБАННЯ ДІТЕЙ З ОРТОДОНТИЧНОЮ ПАТОЛОГІЄЮ	184
39.	Кузенко В.Т., Николайчук Х.Я., Тороус І.М., Буянова І.О. ЕТАПИ МЕЗОТЕРАПЕВТИЧНОЇ КОРЕКЦІЇ ГРАВІТАЦІЙНИХ ЗМІН ОВАЛУ ОБЛИЧЧЯ	187
40.	Куса О.М., Курташ Н.Я., Нейко О.В., Кравчук І.В., Сніжко Т.Б. ЗМІНИ ЕКОСИСТЕМИ ПІХВИ ТА СТАН МІСЦЕВОГО ІМУНІТЕТУ У ЖІНОК З НЕВИНОШУВАННЯМ В АНАМНЕЗІ НА ПРЕКОНЦЕПЦІЙНОМУ ЕТАПІ	189
41.	Сюсюка В.Г., Губа Н.О., Мосол Н.О., Кирилюк О.Д., Шевченко А.О. ОЦІНЮВАННЯ ВРІВНОВАЖЕНОСТІ/НЕВРІВНОВАЖЕНОСТІ ПРОЦЕСІВ ЗБУДЖЕННЯ ТА ГАЛЬМУВАННЯ ЗА СИЛОЮ У ЖІНОК ПІД ЧАС ВАГІТНОСТІ	192

SKIN COMPLICATIONS AFTER SCLEROTHERAPY AND METHODS OF THEIR CORRECTION

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Telangiectasia or spider veins – thin purple, red, or blue lines and are most often found on the legs but may also occur elsewhere, particularly the face. The typical age of telangiectasias presentation is between 30 and 50 years old [1]. Telangiectasias are predominantly an aesthetic problem. Most patients are asymptomatic; however, a minority of patients who do have symptoms often complain of burning, itching, pain, cramps, or leg fatigue [2].

Sclerotherapy is the gold standard for the treatment of telangiectasias. And although literary sources report good results in most patients, sclerotherapy has a number of disadvantages and local complications. Local temporary complications, or negative transitory phenomena, include pain at the injection site, swelling, erythema, and hemorrhage. Local complications that leave permanent changes include hypopigmentation, hyperpigmentation, skin necrosis with the formation of fibrous tissue with the formation of scars and skin atrophy [3, 4].

The main reason for the occurrence of local complications is extravasation of the sclerosant, that is, its exit beyond the telangiectasia into the dermis or subcutaneous tissue. The frequency of complications is affected by many factors, the main ones of which are: the concentration of the sclerosant solution, the diameter of the vessel and the speed of blood flow in it, as well as the quality properties of the vessel wall and the patient's skin itself. Even taking into account all factors, it is very difficult to predict the development of complications in a particular patient. And when the last ones appear, the doctor must take measures to minimize persistent residual changes. [5,6,7].

The aim To investigate the range of complications after sclerotherapy and possible ways of their correction.

Material and methods. The study included 120 patients (These were women aged 26 to 48 years) with telangiectasia of the lower extremities яким була виконана склеротерапія. Local complications were detected in 47 (39.2%) patients during a repeat visit on the 5th day of the post-procedural period. We divided the patients depending on which complications occurred: 28 patients had hematomas at the injection site - the first subgroup, and 19 had hematomas and local (up to 0.6 cm in diameter) skin necrosis - the second subgroup. From the 5th day, 14 patients from the

subgroup with hematomas and 10 patients from the subgroup with local necrosis were prescribed ointment with heparin in the composition. Ointment with heparin was prescribed for 14 days to lubricate problem areas twice a day and wearing compression stockings of the second compression class for 1 month. Other patients in the subgroups simply continued to wear the compression stockings for a month after the procedure.

Results and discussion. The patients' follow-up visit was two months after the procedure. The presence of hypopigmentation, hyperpigmentation, scarring, and skin atrophy were evaluated. Among 14 patients of the first subgroup who used ointment with heparin, persistent complications occurred only in 4 (28.5%) patients (1 (7.14%) patient – hypopigmentation and 3 (21.4%) – hyperpigmentation), compared to 14 patients who did not use the ointment - 11 (78.6%) persistent changes (9 (64.3%) hyperpigmentation and 2 (14.3%) hypopigmentation), that was statistically significant ($p=0.016$). In the second subgroup of patients, among 10 patients who used the ointment, 6 (60%) patients noted hyperpigmentation and 3 (30%) atrophy of the skin, all 9 (100%) patients of this subgroup who did not use the ointment noted the appearance of hyperpigmentation in places of hematomas and local necrosis, and 3 (33.3%) patients showed skin atrophy, however, the difference was not statistically significant ($p=0.297$). All 6 patients with skin atrophy were offered correction of these areas with hyaluronic acid, 5 (83.3%) patients noted significant improvement after this correction.

Conclusion. Skin complications after sclerotherapy occur in about a third of patients. Timely response to them and the appointment of ointment with heparin allows to reduce the frequency of persistent complications ($p=0.016$). Persistent complications such as skin atrophy can also be corrected with the use of hyaluronic acid, which in most patients improves the affected area.

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