Table 2. A doctor's activity factor

	Quality factor						Effectiveness factor			
	Intensity factor	Complexity factor	Coefficient of health survey	Coefficient of diagnoses coincidence	Remission coefficient	Coefficient of repeated cases of visit	Coefficient of visit results	Coefficient of hospitalization	Coefficient of treatment duration	Composite index of medical aid rendering quality estimation
Doctor 1	0,90	0,06	0,86	0,82	0,09	0,16	0,65	0,01	0,91	1,50
Doctor 2	0,86	0,08	0,90	0,75	0,01	0,22	0,58	0,01	0,99	1,28
Doctor 3	0,79	0,07	0,85	0,91	0,01	0,18	0,54	0,02	1,01	1,26
Doctor 4	0,72	0,18	0,92	0,84	0,01	0,19	0,64	0,03	0,89	1,24
Doctor 5	1,13	0,07	0,84	0,82	0,01	0,17	0,76	0,02	1,10	1,94
Doctor 6	0,94	0,10	0,90	0,82	0,22	0,16	0,70	0,04	0,99	1,77
Doctor 7	1,01	0,09	0,45	0,81	0,01	0,20	0,66	0,14	0,99	1,51

4.Romanenko M.G., Babenko A.I. Societal estimation of Marninsk central Ulus hospital of the Republic of Sakha (Yakutia) by its personnel // Problems of public health service management. – 2003 - №5 – pp. 50-53.

5.Kucherenko V.Z., Yakovlev V.P., Kudryavtsev Yu.N., Trofimov A.S. Some approaches to medical-diagnostic process quality estimation // Problems of public health service management. – 2003 - №1 – pp. 13-17.

6.Yakovlev V.P., Kudryavtsev Yu.N., Trofimov A.S. Modern tendencies in medical staff types of wages development // Public health service economics. - 2003. - №7. – pp. 22-24.

7.Kovarov R.N., Komarov N.V. Interviews of doctors and patients on medical aid quality estimation criteria working on remuneration of labour // Problems of public health service management. – 2005 - №3 – pp. 85-88.

8.Shchepin O.P. Methodological foundations and mechanisms of medical aid quality supply / Shchepin O.P., Starodubov V.I., Lindenbraten A.A., Galanova G.N. – M.: Medicine, 2002. – p.176:Il.

9.Antipova N.P., Baidakova N.N., Baryshev S.V., Blandinsky V.F., Grebeshkova L.L., Gruzdeva I.I., Kaikovai L.V., Maiorov M.I., Chernetsom V.A. Analytical report "Analysis of public health service system control in Yaroslavl region", Project TASIS "Russian Federation: public health service system control support", Moscow, 1999.

10. Dyachenko V.G. Report on grant Expert evaluation of medical aid quality. Electronic resource http://www.health.gov.ua

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CARBON DIOXIDE LASER USING EXPERIENCE IN HYPERTROPHIC SCARS TREATMENT

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Cicatrical defects on people's skin are ones of the most common pathologies in the world. On evidence of different authors up to 19% of all patients applied to medical institutions are with hypertrophic scars. Scar problem is of current interest as active working age young people suffer from them.

The purpose of the present work is to study a combined use of hypertrophic skin scars treatment by cryodestruction and CO_2-laser.

The method was used in 17 patients aged from 17 to 35 years old with hypertrophic skin scars from 1 to 5 years old. The patients with the scars were divided into groups according to the scar size. All the patients had linear form of scar. First, high-powered (15- 25 Watts) polishing with CO_2-laser of the most extruded scar portions in continuous beaming mode up to formation of thermal necrosis zone was performed. During the operation the power can be changed for some times. The marking is the tissue color local alteration, i.e. thermal necrosis in the center and the tissue blanching on the edge with ablative deformity. Then within the period from one to three days cryodestruction was carried out. The choice criterion was the termination of so-called "capillary whirl" circum the area of thermal necrosis. For cryodestruction exercise liquid nitrogen was applied. The manipulation is performed extremely quickly, in one movement, carefully taking the scar without touching the boundary zone which has a so-called "verge". Then germfree drapes with liberal amount of acerbine are overlapped.

At the cytological examination of touch smear it has been established that the healing process is accelerated on account of wound process course phologistic phase reduction. Cytologically: inflammatory-regenerative and regenerative cytogram type. It was manifested in quantity reduction of safe neutrophils up to 40-70 %, increase of tissular primitive polyphibroblasts, phibroblasts, lymphocytes up to 20-35 %, increase of macrophages number up to 5-10 %.

Bacteriological data testified to the decrease of the flora amount and the decrease of COI number by a factor of 2-3 in the wounds healed with acerbine.

In 9 persons the change of hypertrophic scars to atrophic ones was without dysfunction. These scars are easily disguised with usual dry powder. In two persons the result was poor positive, i.e. the scar is visually accessible but not skin surface overhanging, without tension function. One cryodestruction scar area elcosis case was marked. Because of allergic anamnesis the treatment with acerbine was carried out. Secondary adhesion with stellation scar formation was performed.

The given method can be recommended for linear skin scars elimination, it seems to be advisable to recommend acerbine using while cryo- and laser-burns owing to excellent cosmetic results, one of explanations of which the pH (acidity) coinciding with the pH of skin is; the method is possible to apply at keloid cicatrices.

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INFLUENCE OF ETHINYLESTRADIOL AND LEVONORGESTREL ON THROMBIN-FIBRINOGEN INTERACTION AND THROMBIN TOLERANCE (information II)

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Side effects [5, 12, 19] – hemostasis disorders and conjugated with it pathological states [1, 12, 19], are intrinsic to estrogen- and gestagen containing preparations applied in hormonal replacement therapy or contraception [3, 4]. It made clinicians pay attention to hemostasis while applying estrogen- or gestagen containing preparations [2]. Sex steroids accelerate lipid peroxidation (LPO) as well [22], that is attended by hypercoagulemia [16], and it heightened interest in investigation of LPO shifts under the influence of gestagens or estrogens in the context of hemostasis [8]. It is also important that hemorrhage affection is combined with deceleration, and thrombotism – with acceleration of thrombin-fibrinogen interaction (TFI) [5, 11], which inversely depends on thrombin tolerance (TT) and LPO activity [20].

Based on the above mentioned we experimentally studied plasmatic content of the TFI markers and TT changes at estrogen ethinyl estradiol (EE) and gestagen levonorgestrel (LNG) introduction in the context of LPO and AOP intensity in thrombocytes.

Methods: In experiments on white female rats (458 species, 170±15 g), fed with viscous consistency ration (barley and oat cereals mixture with oil), we studied the EE, LNG, prooxidant (lead acetate) and antioxidant – dimephosphon (DM), introduced with the morning portion of the ration, effects. Blood samples were taken from v. jugularis from fixed rats (narcosis – diethyl ether). The content of monomeric fibrin soluble complexes (MFSC) [18], fibrin degradation products (FDP) [15], D-dimers ("D-dimer test"-set of the firm Roche), P_3 and P_4 [10] factors, thrombin reacting fibrinogen concentration [14] and thrombin tolerance (TT) [13] were defined in the plasma. The content of diene conjugates (DC) was found out by optical density (λ - 232 nm) of heptanic phase; the content of lipid peroxides, reacting with thiobarbituric acid (TBA), was defined by fluorescence intensity (λ - 510 nm, fluorimeter "Bian130"). By the oxidation rate (OR) and induction period (IP) it was judged about the antioxidant potential (AOP) [21]. The results were evaluated by the method of variance analysis for small observational series, computing the average arithmetic (M), its average error (m), root-mean-square error (σ), confidence coefficient of Student (t) and the degree of difference possibility (p).

TFI and TT markers at EE introduction. The experiments of this family were carried out according to the scheme: the first group rats got the plain ration (control), the second one – the ration with EE (4 mcg/kg), the third – the ration with DM (1 g/kg), the fourth – the ration with DM (1 g/kg) and EE (4 mcg/kg). The samples were taken on the thirtieth day.

The EE introduction (table 1) increased the fibrinogen level and also those of FDP, FSC, D-dimers, P_3 and P_4 [10] factors, the content of DC, TBA, decreased the IP and increased the OR, i.e. accelerated the LPO rate and reduced the AOP. The DM introduction didn't influence the TFI markers, but reduced the LPO rate and increased the AOP. The DM and EE introduction eliminated the TFI shifts caused by EE. The content of DC and TBA turned out to be lower than in the control, the IP lengthened and the OR reduced. The thrombin tolerance decreased at the EE introduction and normalized at the introduction of EE+DM.