

health. Necessary whole system of state and interstate measures: political, economic, social - for optimization a physician-social help to the child population and conservation of wake Russian society, its strategic power, qualitative reproducing a population. So as a whole, in spite of the general negative trends, narcological situation in Priamurye possible consider controlled. However at the evaluation of general demographic situations in the region were reveal following main factors of shortening reproduction of population: falls birth rate beside women in the most favorable reproductive ages (25-29 years); negative demographic future is mortgaged in modern age-sexual to the structure a population; increases an average mother age; change reproductive behavior; falls an age threshold of bad habits, including consumption of drugs (from 7-8 years); worsened condition of surround ambience. In contrast with population census of 1989 year number of population of edge is reduce on 162,3 th.p. (on 10,2%). Specific weight of population of senior able-bodied age in the Priamurye an edge for a period 1989-2002 years is enlarge on 30,2%. Worry causes a correlation of rates of shortening a number of persons of younger age group in the comparison with growth rates of persons of senior able-bodied age. The number first is reduce on 39,3% (on Russian Far East on 40,9%), but increase on 23,5% (in region on 24,8%). Consequences of such demographic development will negative tell on reproduction functions of population and ensuring an economy of region by the labour in the necessary volume. One of the most important problems of demographic welfare of Russian Priamurye is a preventive maintenance, early diagnostics and analysis of reasons of spreading is social significant diseases. Our interdisciplinary studies be indicative of presence of close-fitting intercoupling between different ethnics and socio-cultural features, clinical structure, track record variety of psychic frustrations, is criminal-addiction behavior and drug crimes amongst populations of edge on the medical-ecological areas. With such positions is justified all-round consideration of problems of modern population epidemiological analysis, right choice of research priorities, well-marked a realizing an occur change of vectors and directions in the social, medical science and demographic practice.

Development of ethnocultural aspects human population epidemiology carries in itself not only important theoretical stimulus, connected with the crystallization of biosocial paradigm, as well as powerful demographic and sociotherapeutic preventive charge. Supported by The Russian Humanitarian Scientific Fund, grant №06-06-00410a.

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### **PROGNOSTIC METHODS OF ULCEROUS GASTRODUODENAL HEMORRHAGE RELAPSE**

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There is a sufficient set of variants of early ulcer hemorrhage relapse (further bleeding) prognostication which is one of the major factors in treatment of UGHR patients. In general, all of them are based on clinical experience, the surgeon's intuition, or on the use of objective endoscopic findings with the application of new complex technologies: endosonography, measuring of mucous coat impedance, redox-potential, etc., which are inconvenient for wide application. There is the authors' opinion, that the recurrent hemorrhage prognostication accuracy based only on endoscopic picture and the blood loss severity has reached the maximum and cannot exceed 70 % (1).

The purpose of our work was to create an analytical system, capable to assist an attending physician in solving tactical questions of UGHR disease management, and based on the bleeding relapse prognostication.

#### **Materials and methods**

A retrospective randomized analysis of 411 UGHR case records was carried out by us, the patients having been treated in clinical hospitals of regional centers from 2000 to 2005. A formalized case record (questionnaire of findings) with the unified set of elements, consisting of 125 items was composed. The elements' list (signs, symptoms, laboratory and instrumental data) was being made empirically on the basis of clinical practice. According to the

questionnaire an “Electronic base of UGHR patients for risk factors disclosure in the prognostication of bleeding outcomes” was made. On each sign of the formalized case record its importance concerning the prognostication purpose – bleeding relapse risk, was defined (2.) The significance or reliability of a sign (factor) was defined by means of statistical nonparametric criterion  $\chi^2$  (chi-square). The most significant factors on bleeding relapse risk became 84 ones. Among them: the age of 45 years and older, primary hemorrhage episode in a hospital, admission in terms till 5 days, repeated vomiting with blood, black liquid defecations more than 4 times, gastrointestinal hemorrhage in anamnesis, post-surgical hemorrhage, nonsteroidal antiinflammatory drugs intake, organ failure, oedemata, icterus, hemoglobin at the admission less than 70 g/l, ulcer defect size of 8 mm and more, ulcer defect depth more than 5 mm with possible penetration, subcompensated stenosis of duodenal cap with ulcer defect localization in it – the source of bleeding, any protracted bleeding when carrying out an electrogastroduodenoscopy, the transfused plasma-substituting solutions volume more than 7,3 liters, ignoring eradication therapy, etc.

On the basis of the risk factors importance a computer program was developed: "The program of risk factors search for bleeding dynamics prognostication of patients suffering from ulcer gastroduodenal hemorrhage". The program can be applied in medical establishments of regional and city types, equipped by a minimum of the diagnostic instrumentation and computer technics. Using the patient's checkup results and the disease anamnesis, the results of laboratory and instrumental researches, the obtained data are entered into the program, and after computer processing the doctor receives authentic enough expert opinions on the bleeding relapse risk. Predicting the bleeding relapse threat, the program helps to solve the problem of the necessity to carry out preventive haemostatic actions. It is necessary to recognize, that the conclusions based on the prognostic results, have recommendatory character because the prognostication effectiveness is high enough though, but does not reach a hundred per cent. The responsibility for the treatment outcome is assigned to surgeons; that is why they finally

define the choice of medical tactics at UGHR patients.

#### Conclusions

1. The knowledge of bleeding relapse risk factors allows assuming its probability with sufficient reliability.

2. Program prognostication helps the attending physician to solve the problem of rationality of carrying out emergency preventive haemostatic actions, and aims at the necessity of more skilled experts' consultations.

#### Literature

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#### ERYTHROCYTES' MORPHOMETRIC ANALYSIS AT THE ELDERLY SUFFERING FROM PANCREATIC DIABETES

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At diabetes (D) it is the erythrocytic component that suffers the reaction of activity increase of free radical oxidation first and is the first to exhaust its compensatory possibilities (E.V. Roytman and co-authors, 2001). However, red blood cells' changes in metabolic disturbance complex associated with D are studied not sufficiently, that is becoming the reason of not always adequate metabolic care (Bondar T.P. and co-authors., 2002). The aim of the research was to study the morphometric characteristics of erythrocytes of the elderly (men and women) suffering from D.