

11. Report of the International Conference on Population and Development. N.-Y.: United Nations Publications, 1995. 193 P.
12. The human placenta: a guide for clinicians and scientists / Ed. by Redman C.W.G., Sargent J.L. and Starkey P. Oxford: Boston: Blackwell Scientific Publications. 1993. 598 P.
13. Uzan S. General obstetrics in 1995: the successful application of the most conventional clinical concept to evaluation of the most recent innovation [editorial] // *Curr. Opin. Obstet. Gynecol.* 1995. V. 7. №6. P. 415-416.

ШЛЯХИ ОПТИМІЗАЦІЇ ЛІКУВАННЯ ТА ДІАГНОСТИКИ ЗАГРОЗЛИВИХ СТАНІВ ПЛОДУ: МАТЕМАТИЧНИЙ АСПЕКТ ПРОБЛЕМИ

I.V. Lakhno

Харківський національний університет ім. В.Н. Каразіна

РЕЗЮМЕ

Подана модель внутрішніх взаємодій у рамках системи мати-плацента-плід, на підставі якої проаналізовані існуючі діагностичні та терапевтичні підходи при фетоплацентарній недостатності.

КЛЮЧОВІ СЛОВА: система мати-плацента-плід, фетоплацентарна недостатність, математичне моделювання, діагностика та лікування

THE WAYS OF THREATENED FETAL STATUS DIAGNOSTICS AND TREATMENT OPTIMIZATION: MATHEMATICAL ASPECT OF THE PROBLEM

I.V. Lakhno

The Karazin National University of Kharkov

SUMMARY

The article presents a matrix model of internal links in the system of mother-placenta-fetus. The existing diagnostic and therapeutic approaches of the fetoplacental insufficiency treatment were analyzed on its basis.

KEY WORDS: system of mother-placenta-fetus, fetoplacental insufficiency, mathematical modelling, diagnostics and treatment

УДК: 616.1/4.:036..22

FREQUENCY FEATURES OF CHRONIC NON-TUMORAL SIALADEN DISEASES OF THE POPULATION OF THE KHARKOV REGION

I.G. Lesovaya

The Medical Postgraduate Academy of Kharkov, Ukraine

SUMMARY

The information on frequency of chronic non-tumoral sialaden diseases of various groups of the population of the Kharkov region, according to the archive data of the specialized clinic of the Kharkov Medical Postgraduate Academy is submitted in this work.

KEY WORDS: not tumoral diseases, sialadens, prevalence, category of the population

INTRODUCTION

Chronic not tumoral diseases of sialadens: the sialadenites, sialoses and defeats of sialadens at a set of Sjogren sindrom – are difficult in diagnostics and treatment. On the data of the literature

these pathological processes meet from 2,9 up to 7% among total of diseases of maxillo-facial area. The authors specify a plenty of the forms, for each of which the parentage remains not determined. The variety of diseases of sialadens causes also large volumes of methods of research, at

which the picture of illness is mainly detailed. In this direction are concentrated the most part of works on a considered problem [2,3,4,5]. There is a necessity for search of essentially new ways of research, as the detailed elaboration of knowledge about features of separate diseases does not give essential progress. The similar analysis is necessary and consequently, that the mass researches were executed already enough for a long time. The earlier received data on prevalence of diseases are based on local inspections, which results are difficultly comparable. Specifications also demand. Besides the published results concern regions of Russia. Especially important this work is represented in conditions of constantly varying social and ecological conditions.

The purpose of the given research is the statistical analysis of large homogeneous file on prevalence of diseases sialadens of Ferri lactases among various categories of the population in the Kharkov region of Ukraine.

MATERIALS AND METHODS

For the analysis the data on the patients with not tumoral diseases of sialadens are used which passed treatment with 1989 for 1998 in clinic of maxillo-facial surgery of medical academies post-diplom of education of Kharkov. Quantity of the patients given which analyzed, has made 837 men. The databanks contained the following parameters: a sex, age, date of entering (month), duration of stay in a hospital, diagnosis at entering and extract. For an estimation of changes of parameters on years and check of fastness of researched features of a case rate, each bank was broken on two. Thus, were analyzed and the data 2 independent databanks were compared which further we shall designate for brevity as X1 – given for the Kharkov clinic with 1989 for 1993 inclusive (370 patients), and X2 – given with 1994 for 1998 (467 patients). For an estimation of prevalence of diseases of sialadens among all of diseases maxillo-facial area the data on total of the patients in the specialized branch of the mentioned above clinic are used also. At researches took into account: general number of the patients-data do not allow unequivocally to specify, this difference by the real reasons is caused or reflects incompleteness of the data.

The quantity of the men and women with chronic not tumoral diseases of sialadens has appeared in a file X2 above, than in a file X1. The parity considerably changes, submitting the strict law suffices: than the above general level of disease, the more it wide-spreads among the women. This law illustrates a fig. 1. The curve for the men

N, (or quantity falling ill); frequency of diseases-F (or case rate), i.e. number of the patients come on some number of the inhabitants in unit of time. All meanings F are given at the rate of on 100000 inhabitants per one year. It is necessary to note, that the account F causes the certain difficulties that the Kharkov clinic is regional. In clinic the patients from cities, area and other areas act. On the given parameters it is possible to judge a case rate of all Kharkov region. The basic part of the patients is necessary on urban and regional (village) polyclinics of area, therefore account is carried spent, proceeding from quantity of the inhabitants of the Kharkov area.

As distribution of the inhabitants on a sex and age stable enough, such uncertainty could not considerably affect meanings F, considered for separate age groups and separately for the men and women. The data on a population and its frame are taken from demographic year-books for the appropriate years at first USSR, then - Ukraine. At research of age features all accounts are carried spent for 5-year's age intervals (0-4, 5-9, 10-14 etc.), appropriate to the accepted division on age in demographic year-books. The statistical data processing was made by criteria Student [1].

RESULTS AND DISCUSSION

In the table the general items of information on frequency of diseases of sialadens in the Kharkov region are submitted. Their general quantity stably enough also changes no more than in 1,4 times and per different years can differ in 3 times from change of frequency all of diseases maxillo-facial area. The densities of not tumoral Ferri lactases of pathologies sialodens makes 2,9% among of diseases maxillo-facial area. At comparison of the data for separate years, of a pathology maxillo-facial area and the chronic not tumoral diseases of sialadens change independently from each other and can concern to different nosological groups.

The quantity of diseases changed with the tendency to decrease in 1990-1994. However, in X2 a file the frequency has increased. The available passes in regular more intervals, than for the women. In result, at a low level of a case rate quantity of the patients of the men, in 1,5-2 times are more, than women. Then, as at a high case rate - approximately in 1,5 times of the men it is less. Also it is necessary to note, that the prevalence of disease among the men is regularly higher, than among the women.

There is a seasonal repeatability in maximums of a case rate. In a fig. 2 the distribution of quan-

tity of diseases on months for all volume of the data is given. The winter maximum is clearly shown which has two peaks - in the beginning and end of winter, that, probably, is connected to a continental climate and approach of the strongest frosts in these periods. It is marked as well a

springing and summer maximum. The autumn maximum of a case rate is brightly expressed. In first half of year the case rate among the women is regularly higher, than among the men, in second half of year – on the contrary.

Table

The general items of information on frequency of not tumoral diseases of sialadens

Years	Kharkov region				
	Stomat. diseases	Diseases Sialadens			In % to stomat.diseases
		all	men	women	
1998	2895	48	27	21	1,7
1990	3047	103	57	46	3,4
1991	2970	92	40	52	2,3
1992	3095	69	46	23	2,2
1993	3060	58	31	27	1,9
X1		370	201	169	2,3
1994	3194	76	40	36	2,4
1995	2783	99	52	47	3,4
1996	2582	97	51	46	3,8
1997	2254	93	49	44	4,1
1998	2845	102	54	48	3,6
X2		467	246	221	3,5

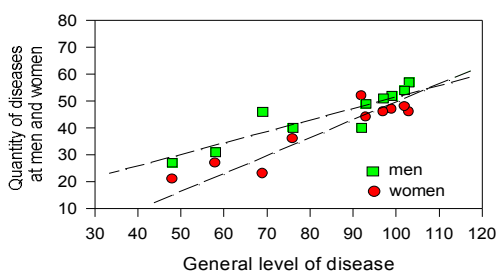


Fig. 1. Quantity of sialadens diseases at the men and women according to the general number of diseases

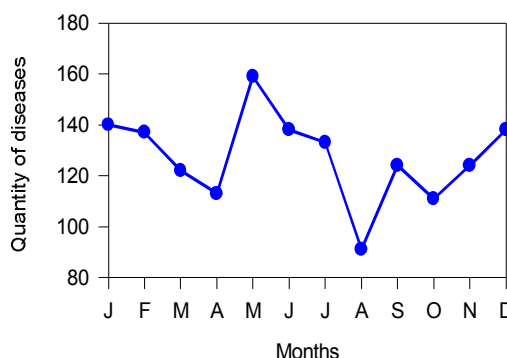


Fig. 2. Seasonal changes in quantity of sialadens diseases

In distribution of diseases on age, on a background of the constantly present fluctuations are observed replicating from one year by year of law. Total of diseases in different age (on 5-year's intervals) is submitted in a fig. 3 (above) and, in account on 100000 men per year of the given age category – in a fig. 3 (below). First of all, it is necessary to pay attention that the sharp decrease of number of diseases after 60 years is connected not to disappearance of the reasons of disease, and with decrease of the population of the given age category. Exacter comparison of a case rate on the average and advanced age represents the certain difficulties in view of small quantity of the people of elderly age, therefore for 75 and more than years should be surveyed the received

data as estimated. For the adult population, on each age interval at the men and women it is necessary 2-4 cases of disease per one year. The case rate in any age has made on 100000 men – 42 cases at the men and 35 – at the women. Steadiest are the following age features of disease. Till 15 years of disease are individual. Exception make 1995 and especially 1998, on which all cases of disease in children's age, including till 10 years have practically. At the men the case rate sharply grows after 20 years and remains approximately at one level up to deep old age. For age 20-35, 50-60 and 70-80 case rates are a little bit higher, than other years. At the women the augmentation of a case rate with age occurs in regular more intervals and reach the maximal meanings in 45-60 years.

Steady augmentation of a case rate in 15 - 20 and 70-75 years also is. In young age, till 40 years, the diseases of sialadens at the men meet regularly more often, than at the women, for age more than 40 years – on the contrary (see fig. 3 above). If to take into account, that with age the quantity of the

men decreases much faster, than women, the case rate at the men is higher in any age, except for 45-55 years (see fig. 3 below). If to compare the data for separate years, it appears, that the parity of a case rate among the men and women even is steadier, than general age features.

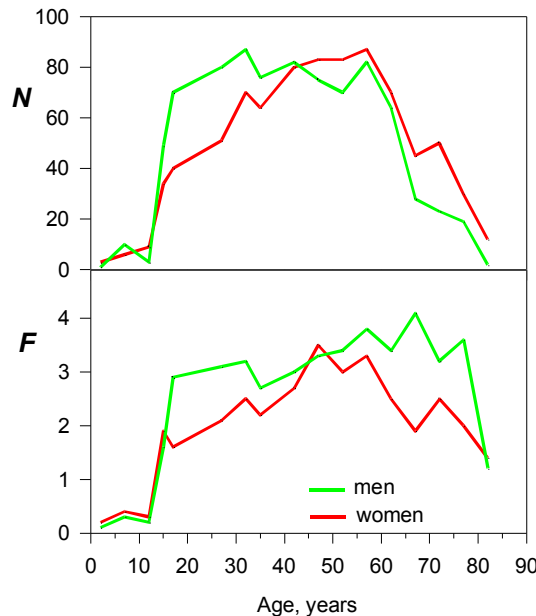


Fig. 3. Age features in sialadens diseases: N - general number of the patients; F - frequency of diseases

The duration of treatment is approximately peer for all four files. Last years the insignificant tendency to decrease of duration of stay in a hospital is marked. On the average, 37% of the patients were in a hospital no more than 8 day, 46% – from 9 about 16 day, 11% – from 17 about 24 day and 6% – 25 and more (up to 35) day. The long stay in a hospital, in a peer measure frequently, meets at the patients of both floors and different age groups. Some augmentation of this parameter is marked only for cases of the maximal case rate. This implies, that the augmentation of number of diseases is accompanied by intensi-

fyng of gravity of disease.

CONCLUSIONS

1. Frequency of chronic not tumoral pathologies of sialadens per different years variously. Maxillo-facial area of disease and the diseases of sialadens change independently from each other. The share of diseases of sialadens among maxillo-facial area of diseases has made 2,9% in the Kharkov region, that differs from the known data a little. In last the decade

is marked augmentation of quantity of the patients with the given pathology.
 2. The quantity of the men and women with diseases of sialadens is peer. The parity considerably changes on years and files, - than above general level of disease, the more it wide-spreads among the women. In the Kharkov region the prevalence of disease among the men is regularly higher, than among the women.

The comparative data for separate years, specify, that the parity of a case rate among the men and women is steadier, than general age features.

3. There is a seasonal repeatability in an exacerbation. The winter, springing and summer maximums of a case rate are clearly shown. And, the winter maximum is split on two peaks. In first half of year the case rate among the wom-

en is regularly higher, than among the men, in second half of year - on the contrary.

4. The age laws of a case rate are expressed. In children's age the not tumoral diseases salodens of Ferri lactases are individual. After 20 years a case rate among the men sharply grows and remains approximately at one level up to deep old age. At the women the augmentation of a case rate with age occurs in regular more intervals and reach the maximal meanings in 45-60 years. In any age the case rate at the men is higher, except for 45-55 years. In elderly age the decrease of a case rate is con-

nected to decrease of the population of the given age category. For the adult population, on each age interval at the men and women it is necessary 2-4 cases of disease per one year.

5. It is marked the tendency to reduction of terms of stay in a hospital in a peer measure at the patients of both floors and different age. Some augmentation of this parameter is marked only for cases of the maximal case rate. The augmentation of frequency of diseases is accompanied also by intensifying of gravity of disease.

REFERENCES

2. Генес В.С. Некоторые простые методы кибернетической обработки данных диагностических и физиологических исследований. М.:Наука. 1967. 284 С.
3. Заболевания и повреждения слюнных желез. Ромачева И.Ф., Юдин Л.А., Афанасьев В.В., Морозов А.Н. М.: Медицина. 1987. 240 С.
4. Солнцев А.М., Колесов В.С., Колесова Н.А. Заболевания слюнных желез. К.:Здоров'я. 1991. 312 С.
5. Семенченко Г. И., Коваленко А.Ф. Классификация воспалительных и воспалительно-дистрофических заболеваний слюнных желез. // Хирургическая и ортопедическая стоматология. 1979. № 9. С. 6-12.
6. Тимофеев А.А. Руководство по челюстно-лицевой хирургии и хирургической стоматологии. К.:ООО "Червона Рута – Турс". 1998. Т. II. 388 С.

ОСОБЛИВОСТІ ЧАСТОТИ ХРОНІЧНИХ НЕПУХЛИННИХ ЗАХВО- РЮВАНЬ СЛИННИХ ЗАЛОЗ СЕРЕД НАСЕЛЕННЯ ХАРКІВСЬКОГО РЕГІОНУ

І. Г. Лісова

Харківська медична академія післядипломної освіти

РЕЗЮМЕ

У роботі подано інформацію про частоту хронічних непухлинних захворювань слинних залоз серед різних груп населення Харківського регіону за даними архіву спеціалізованої клініки Харківської медичної академії післядипломної освіти.

КЛЮЧОВІ СЛОВА: непухлинні захворювання, слинні залози, розповсюдження, категорії населення

ОСОБЕННОСТИ ЧАСТОТЫ ХРОНИЧЕСКИХ НЕОПУХОЛЕВЫХ ЗАБОЛЕВАНИЙ СЛЮННЫХ ЖЕЛЕЗ СРЕДИ НАСЕЛЕНИЯ ХАРЬКОВСКОГО РЕГИОНА

И.Г. Лесовая

Харьковская медицинская академия последипломного образования

РЕЗЮМЕ

В работе представлена информация о частоте хронических неопухолевых заболеваний слюнных желез среди различных групп населения Харьковского реги ⁹⁷ по данным архива специализированной клиники Харьковской медицинской академии последипломног ⁹⁷ разования.

КЛЮЧЕВЫЕ СЛОВА: неопухолевые заболевания, слюнные железы, распространенность, категории населения