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## NEW POSSIBILITIES OF CHRONIC PANCREATITIS TREATMENT USING DRUG *LIVERIA IC*

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#### Rezumat

#### Noi posibilități de tratament al pancreatitei cornice cu preparatul Liveria IC

Acest studiu a examinat pacienții cu pancreatită cronică. Se demonstrează eficiența preparatului Liveria IC, inclus în tratamentul tradițional al pancreatitei cronice, în ceea ce privește diminuarea sindroamelor dolor și dispeptic, precum și în scăderea indicilor izoamilazei pancreatice în sânge și urină.

Cuvinte-cheie: pancreatită cronică, durere, dispepsie, izoamilază pancreatică, Liveria IC

#### Резюме

### Новые возможности лечения хронического панкреатита с использованием препарата Ливерия IC

Нами обследованы пациенты с хроническим панкреатитом. Исследование показало эффективность включения в традиционную терапию хронического панкреатита препарата Ливерия IC относительно уменьшения болевого и деспептических синдромов, а также показателей панкреатической изоамилазы крови и мочи.

**Ключевые слова**: хронический панкреатит, боль, диспепсия, панкреатическая изоамилаза, Ливерия IC

#### Introduction

In many patients chronic pancreatitis results from a complex of environmental factors (alcohol, cigarettes smoking and occupational chemicals), some of patients have genetic, hereditary or autoimmune nature of disease. The alcoholic nature of the chronic pancreatitis dominate not only in Ukraine but in Europe also, and chronic alcohol consumption associated with 38–94% of cases of pancreatitis in the developed countries, but is now increasing worldwide due to growing consumption of alcohol in each nation [8]. About 20% of men and 9% of women admit to hospitals with various diseases of alcoholic etiology in Europe [3, 4, 5, 8]. It is well known that increase spread of chronic pancreatitis in Ukraine, associated with rise of alcohol consumption, so we have a great interest to asses and improve the efficiency of the treatment of patients with chronic pancreatitis [3, 6, 9].

According the different sources drug Liveria IC showed sufficient efficacy in the treatment of chronic hepatitis of various, especially of alcoholic etiology, that's why we had great interest to evaluate the effi-

cacy of Liveria IC in patients with chronic pancreatitis [7]. Liveria IC (1 tablet includes 0, 5 gr. of metadoxin) has anxiolytic, hepatoprotective, desintoxicate, antifibrotic, anti-oxidant and anti-depressive effect [7].

Aim of investigation was to assess the efficacy of the drug Liveria IC on the dynamic of abdominal pain, dyspepsia and biochemical data, such as pancreatic isoamylase (p-isoamylase) in blood and urine in patients with chronic pancreatitis.

#### Materials and methods

We investigated 72 patients with chronic pancreatitis, 49 (68.1%) of them had chronic alcoholic pancreatitis. Main group include 37 patients with chronic pancreatitis who received traditional therapy with antisecretory, spazmolitic, enzyme therapy, whom had been added Liveria IC 1tablete 2 times per day 15–30 minutes before meals for three months. In the comparison group were included 35 patients with chronic pancreatitis who received only traditional therapy of chronic pancreatitis. A control group included 30 healthy persons. Before and after treatment we assessed the dynamics of pain , dispeptic syndrome, indicators of pancreatic isoamylase in blood and urine.

Severity of complains and painfulness of palpation we estimate with index of average severity of manifestation (ASM) [2]. We used semiquantitative scale:

0 score - there are no manifestations;

1 score – minimal manifestation:

2 scores - moderate manifestations;

3 scores – significant manifestation.

In view of the scale we calculate ASM of clinical manifestations by formula:

$$ASM = \frac{a+2b+3c}{a+b+c+d},$$

where ASM is the average severity of manifestations;

- a the number of patients with manifestation of symptoms with 1 score;
- b the number of patients with manifestation of symptoms with 2 scores;
- c the number of patients with manifestation of symptoms with 3 scores;
- d the number of patients with no symptoms.

Level of p-izoamilase conducted with Vitalab Analyzer Flexor (Netherlands) using sets firm Lachema (Czech Republic).

#### Results and discussion

The leading symptom of all examined patients was abdominal pain. Most common location of pain was – epigastric region and both hypochondrium aria – 24 (33.3%) patients. Pain in epigastric region

and right hypochondrium in 15 (20.8%) patients, in the right hypochondrium only – 10 (13.9%) patients, epigastric region and left hypochondrium – 11 (15.3%) patients, only in epigastric region – 4 (5.6%) patients, only in the left hypochondrium – 8 (11.1%) patients.

In the main group patients before treatment dominated moderate abdominal pain – 18 (48.7%) patients; the intensity of the pain was minimal at 11 (29.7%) patients, significant – 8 (21.6%) patients. ASM of pain syndrome in the main group before the treatment was 1.92. In the comparison group the intensity of the pain was similar and determined 18 (51.4%), 10 (28.6%) and 7 (20.0%) of patients correspondently. The ASM of this syndrome in the comparison group was 1.91.

Before treatment dyspepsia was at all examined patients. 15 (40.6%) patients of main group had intensive dyspepsia, 9 (24.3%) – moderate, 13 (35.1%) – minimal dyspepsia. ASM of dyspeptic syndrome in this group was 2.05, in the comparison group the intensity of this syndrome was determined respectively by 16 (45.7%), 12 (34.3%) and 7 (20.0%) patients. ASM of dispeptic syndrome in the comparison group before the treatment amounted 2.26.

After treatment dynamics of clinical manifestations was more pronounced in patients of main group. So, ASM of pain syndrome after treatment in the main group was 0.91, unlike the comparison group was 1.53, 1.68 times higher. The most effective was main variant of treatment concern the dyspeptic syndrome too. After the treatment the ASM of this syndrome in patients of main group was 0.99 and in comparison group was 1.57, so 1.59 times higher.

More significant dynamics of p-isoamilase in blood and urine was also in the main group unlike comparison group patients. P-isoamilase in blood was  $2.05\pm0.14$  mccat/l before treatment in main group patients and after treatment was  $0.99\pm0.08$  mccat/l (p<0.05) and in the comparison group patients before treatment was  $1.39\pm0.08$  mccat/l and after  $1.02\pm0.12$  mccat/l (p>0.05), in healthy persons was  $0.87\pm0.13$ /l mccat. P-isoamilase in urine in patients of the main group before treatment was  $7.05\pm0.25$  mccat/l after treatment was  $4.30\pm0.27$  mccat/l (p<0.05) and in the comparison group patients  $6.53\pm0.21$  mccat/l before treatment and  $5.26\pm0.58$  mccat/l (p>0.05) after, in healthy persons was  $3.32\pm0.39$  mccat/l.

#### Conclusion

Treatment of patients with chronic pancreatitis with Liveria IC inclusion leads to reduction of insensitivity of pain, dyspepsia and positive dynamics of such biochemical data like pancreatic isoamylase in blood and urine.

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# THE EFFECT OF THE PRESENCE OF DIABETES MELLITUS ON CLINICAL COURSE OF CHRONIC PANCREATITIS BY M-ANNHEIM SCORING SYSTEM

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#### Rezumat

## Efectul diabetului zaharat asupra evoluției clinice a pancreatitei cronice conform clasificării M-ANNHEIM

Pancreatita cronică este o boală dificil de diagnosticat și de tratat. Scopul studiului a fost de a evalua severitatea pancreatitei cronice prin clasificarea M-ANNHEIM conform prezenței insuficienței pancreatice endocrine. Au fost analizate prezența insuficienței pancreatice excretorii și incretorii, schimbările structurale ale pancreasului prin ultrasonografie, coprogramă, nivelul de hemoglobină glicozilată în sânge, numărul complicațiilor la 38 de pacienți cu PC(grupul 1) și pancreatită cronică asociată cu diabet (grupul 2). Corelația strânsă dintre gradul de severitate al PC în clasificarea M-ANNHEIM și criteriile obiective de leziuni cronice ale pancreasului demonstrează informativitatea sa înaltă, care este noutatea studiului nostru.

**Cuvinte-cheie**: pancreatită cronică, diabet zaharat, clasificare M-ANNHEIM, grad al pancreatitei cronice

#### Резюме

#### Влияние сахарного диабета на клиническое течение и тяжесть хронического панкреатита в соответствии со шкалой M-ANNHEIM

Хронический панкреатит (ХП) относится к заболеваниям, которые сложно диагностировать и лечить. Целью исследования было оценить тяжесть хронического панкреатита в соответствии с классификацией M-ANNHEIM в зависимости от эндокринной недостаточности поджелудочной железы (ПЖ). Были проанализированы: структурные изменения ПЖ по ультразвуковым критериям, копрограмма, уровень гликозилированного гемоглобины, частота осложнений у 38 больных ХП без и с сопутствующим сахарным диабетом. Была выявлена тесная корреляция между тяжестью XII по классификации M-ANNHEIM и объективными критериями хронического поражения поджелудочной железы. Наличие эндокринной недостаточности ПЖ осложняло тяжесть заболевания в соответствии со шкалой M-ANNHEIM, коррелируя c нарушениями копрограммы (r=0.702; p<0.001), ультразвуковыми критерияи (r=0.55; p<0.05), уровнем гликозилированного гемоглобины (r=0.678; p<0.01).

**Ключевые слова**: хронический панкреатит, сахарный диабет, шкала M-ANNHEIM

#### Introduction

Chronic pancreatitis (CP) is the disease difficult to diagnose and treat. This is due to the low sensitivity of the tests and functional imaging techniques pancreas. The problem of diagnosing chronic pancreatitis cannot be considered solved. CP remains a difficult problem of clinical medicine and surgery, as in many