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2-TIP QANDLI DIABET BOR BEMORLARDA MIOKARD INFARKTINING KECHISH XUSUSIYATLARI

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✓ *Resume*

Maqsad: Qandli diabet bilan bog'liq bo'lgan miokard infarktining o'tkir osti davrini og'irlashtiradigan 2 turdagi omillarni aniqlash.

Tadqiqot material va usullari: miokard infarktining o'tkir davridan omon qolgan (o'limga olib kelmaydigan) 120 nafar bemor tekshirildi: 2-toifa qandli diabet bilan - 65 bemor va 2-toifa diabetsiz - 55. Bemorlarni tekshirish quyidagilarni o'z ichiga oladi: shikoyatlar to'plami. va anamnez, fizik tekshiruv, biokimyoviy tahlillar va instrumental tadqiqot usullari, elektrokardiogrammani ro'yxatga olish va kasalxonaga yotqizilgandan so'ng, o'tkir osti davr oxirida va kasalxonadan chiqarilgandan keyingi elektrokardiografiya.

Xulosa: qandli diabet bilan og'rigan bemorlarda miokard infarkti boshlanishining bir varianti, yurak yetishmovchiligining og'irligi sababli kardinal patologiyaning og'ir kursi, aritmiya va infarktdan keyingi erta angina pektorosining tez-tez uchraydigan holatlari mavjud. Og'riqsiz miokard ishemiyasi. Miokard infarktining og'irligi diabetik tajriba, giperglikemiya, diabetik nefropatiya va neyropatiyaning davomiyligi bilan kuchayadi. Jiddiy dekompensatsiya, shuningdek, glikozillangan gemoglobinning nisbatan past ko'rsatkichlari miokard infarktining IV toifadagi og'irlik darajasining yuqori tarqalishi, chap qorincha zarb hajmi pasayishi va erta postinfarkt angina pektorosi bilan birga keladi.

Kalit so'zlar: miokard infarkti, 2-toifa qandli diabet, chap qorincha zarb hajmi.

ОСОБЕННОСТИ ТЕЧЕНИЯ ИНФАРКТА МИОКАРДА У БОЛЬНЫХ САХАРНЫМ ДИАБЕТОМ 2 ТИПА

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✓ *Резюме*

Цель: выявление 2 типов факторов,отягощающих течение подострого периода инфаркта миокарда, ассоциированного с сахарным диабетом.

Материалы и методы: проведено обследование 120 пациентов, переживших острый период инфаркта миокарда (несмертельный): с сахарным диабетом 2 типа - 65 пациентов и без сахарного диабета 2 типа – 55.Обследование пациентов включало: сбор жалоб и анамнеза,физикальный осмотр, биохимические анализы и инструментальные методы исследования, регистрация электрокардиограммы,и эхокардиографию при поступлении в стационар, в конце острого периода и по завершении госпитализации.

Выводы: у пациентов с сахарным диабетом отмечается вариант начала инфаркта миокарда,тяжелого течения кардинальной патологии, обусловленной выраженностью сердечной недостаточности, большей частотой развития аритмий и ранней постинфарктной стенокардии. Ишемия миокарда без боли. Тяжесть инфаркта миокарда усугубляется длительностью диабетического стажа, гипергликемией, диабетической нефропатией и невропатией. Выраженная декомпенсация, а также относительно низкие значения гликозилированного гемоглобина сопровождаются высокой распространенностью IV класса тяжести инфаркта миокарда, снижением фракции выброса левого желудочка, ранней постинфарктной стенокардией.

Ключевые слова: инфаркт миокарда, сахарный диабет 2 типа, фракция выброса левого желудочка.



FEATURES OF THE COURSE OF MYOCARDIAL INFARCTION IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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✓ Resume

Aim: identification 2 types of the factors burdening a current of the subacute period of a myocardial infarction associated with a diabetes mellitus.

Materials and research methods: it is surveyed 120 patients who have worried the acute period of a myocardial infarction (not fatal): with a diabetes mellitus 2 types - 65 patients and without a diabetes mellitus 2 types – 55 Inspection of patients included: the collecting of complaints and the anamnesis, physical inspection, biochemical analyses and tool methods of research, electrocardiogram registration, and echocardiography when entering in a hospital, to the extremity of the acute period and at completion of hospitalization.

Conclusions: the option of the beginning of a myocardial infarction, the serious course of cardiac pathology caused by expression of a heart failure, by the larger frequency of development of arrhythmias and early postmyocardial infarction stenocardia is noted at patients with a diabetes mellitus myocardial ischemia without pain. Gravity of a myocardial infarction is aggravated with duration of a diabetic experience, a hyperglycemia, a diabetic nephropathy and a neuropathy. The expressed decompensation, as well as rather low values of a glycosylated hemoglobin are accompanied by high prevalence of the IV class of gravity of a myocardial infarction, depression of fraction of emission of a left ventricle, early postmyocardial infarction stenocardia.

Keywords: myocardial infarction, diabetes mellitus 2 types, fraction of emission of a left ventricle.

Relevance

In patients of group I, the cardiovascular history was statistically more often burdened with respect to arterial hypertension and CHD, however, the frequency of preceding THEM did not differ in the study groups. There were no statistically significant differences in the type of myocardial infarction: QMI was observed in 47.76% of cases with concomitant T2DM, and in 50.0% in the absence of diabetes ($p=0.79$). They confirmed the well-known fact that in DM, the typical angina variant of MI onset is significantly less common, which is usually associated with a decrease in pain sensitivity due to the development of diabetic neuropathy. In patients with concomitant T2DM, the asthmatic variant of MI onset was statistically more frequent, which may indicate a greater severity of myocardial dysfunction in patients of the main group. This assumption correlates well with the structure of the Killip HF severity classes and LV ejection fraction (LVEF) in the examined patients: high HF severity is a characteristic feature in those patients with diabetes and MI who have experienced an acute period. Transmural infarcts were most common (68.1%), intramural infarcts in 26.8%, and sub-endocardial infarcts in 5.1%. In 30.4% of cases, infarcts were localized in the anterior wall of the left ventricle with involvement of the interventricular septum and apex, 27.7%-posterior and posterolateral, 17.4% - in the anterior and anterolateral walls of the left ventricle. Infarctions of the anterior (6.5%) and posterior (8.7%) walls of both sexes were also noted. ventricles with involvement of papillary muscles and interventricular septum. Analysis of the clinical course of MI showed greater severity in DM, which is consistent with the literature data. These patients were characterized by a higher frequency of recurrent MI with acute complications in the form of cardiogenic shock, cardiac arrhythmias, AHF, thromboembolic complications, and a tendency to a higher frequency of myocardial ruptures. DM patients were characterized by more severe acute heart failure according to the Killip classification ($p=0.001$) and maximal MI severity classes ($p=0.002$). A characteristic feature of DM patients was the older age (69.9 years) and the predominance of women (66.0%, $p=0.04$). The analysis showed that the elderly (>65 years) age adversely affected the course of MI in the presence of DM ($p<0.05$). There was also an unfavorable effect of the female sex in the main group of patients in the form of a higher frequency of such complications as left ventricular aneurysm (26.7 and 13.9%, $p=0.02$), acute left ventricular failure (25.4 and 11.1%, $p=0.01$), a pronounced decrease in the ejection fraction ($p=0.04$). In patients with HbA1c >8.9%, less often (50%)

in patients with HbA1c in the range of 7.0-8.9, but paradoxically more often, in 91.7% of cases, in patients with HbA1c <7.0% (p=0.03). A similar pattern is found in relation to LVEF and rhythm disorders, although in some cases it is more common in patients with HbA1c < 7.0% (p = 0.03). in the latter case, we can only speak of a trend. At the same time, for such manifestations as early post-infarction angina, as well as FC CHF (NYHA) on day 5-7 of hospitalization, a paradoxical inverse relationship was observed. The level of glycemia at admission to the clinic is statistically significantly associated with a more severe course of acute MI, especially in relation to circulatory disorders. With glycemia ≥ 8 mmol / L, more severe heart failure classes according to T.Killip and more severe CHF FC (NYHA) predominate on day 5-7 of hospitalization. There were no significant differences in the frequency of rhythm disturbances for values greater and less than 8 mmol/l. However, for a glycemic threshold greater than 12 mmol/L, these differences were more significant (66.7% vs. 37.0%) and approached significant (p=0.06). In the group with glycemia >9.5 mmol/L, acute left ventricular failure was significantly more common in the acute MI period (82.4%), in the group with glycemia < 6.5 mmol/L-in 17.7%, from 6.5 to 9.5 – 0%, (p=0.03), early post-infarction angina (60% in the group with glycemia < 6.5 mmol / l). glycaemia >9.5 mmol/l, 37.1% at < 6.5 mmol/L, 2.86% at a glucose level of 6.5 to 9.5, p=0.03). We paid attention to the pronounced metabolic disorders in the main group, and first of all, the glycemic indices recorded during hospitalization.

The study shows a correlation between the severity of MI and the level of hyperglycemia. Thus, among DM patients with glycemia ≥ 8.0 mmol/L, Q MI was more often diagnosed - 57.1% (p=0.001) and the maximum severity class MI – 63.3% (p=0.002), as well as complication in the form of cardiogenic shock - 26.5% (p=0.03). General hypercholesterolemia in DM2 patients did not increase the risk of MI. An increased risk of MI was found at TG > 1.7 mmol / l Correlation analysis confirms the association of hyperglycemia with some features of MI management in DM that characterize its severity: the presence of Q MI (p=0.02), MI severity class (p=0.03), the presence of acute arrhythmias (p=0.02), and the development of cardiogenic shock (p=0.04). Glycemic index < 5.5 mmol/l in the acute period was also associated with severe MI. Thus, there was an inverse correlation with the maximum MI severity class (p=0.02) and arrhythmias (p=0.011). Patients with DM were characterized by an increase in the size of the left atrium(LP), the thickness of the interventricular septum, the mass of the left ventricular myocardium, and a decrease in the ejection fraction (EF); in DM, a high frequency of grade I-II mitral regurgitation was detected-37.3% and 23.4%, p=0.04.

Conclusions

Thus, with concomitant type 2 diabetes, MI patients are significantly more likely to have a pain-free variant of the onset of the disease (p=0.001), characterized by a more severe course of cardiac pathology due to the severity of heart failure, a greater frequency of arrhythmias and early post-infarction angina. The severity of MI in patients with type 2 diabetes is compounded by the length of diabetic experience, hyperglycemia, diabetic nephropathy, and neuropathy.

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