

THE TRACE ELEMENT BLOOD COMPOSITION VARIATION OF ACUTE INTERSTITIAL PANCREATITIS

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Acute interstitial pancreatitis (AIP) is an acute inflammatory disease of the pancreatic gland with autodigestion of pancreatic tissue often incurring variable damage to adjacent organs.

Objective: To improve the diagnostic results of acute pancreatitis which are based on the level of trace elements in blood plasma.

Materials and methods: We had investigated 67 patients who received treatment for AIP in surgical department in Sumy State Hospital for the period since 2010 to 2012 years. We analyzed the level of urinary diastase and the level of trace elements (Calcium, Potassium and Magnesium) in blood plasma from every patient from the first till the seventh day and on discharge day they had received treatment for AIP in surgical department.

Results: The average urinary diastase indexes ($M\pm m$) in the group with AIP during the first day of treatment were 371 ± 40 units, during the third day were 243 ± 32 units, during the seventh day were 43 ± 5 units, and on discharge day were 33 ± 3 units. The average Calcium indexes ($M\pm m$) during the first day of treatment were 2.32 ± 0.09 , during the third day were 2.57 ± 0.08 , during the seventh day were 2.52 ± 0.14 , and on discharge day were 2.31 ± 0.11 . The average Potassium indexes ($M\pm m$) during the first day of treatment were 4.45 ± 0.21 , during the third day were 3.87 ± 0.24 , during the seventh day were 2.72 ± 0.17 , and during on discharge day were 3.84 ± 0.27 . The average Magnesium indexes ($M\pm m$) during the first day of treatment were 1.02 ± 0.04 , during the third day were 0.57 ± 0.02 , during the seventh day were 0.65 ± 0.06 , and on discharge day were 0.83 ± 0.11 .

Conclusions: The results of our research indicate that the dynamic studying of trace elements level (Calcium, Potassium and Magnesium) in blood plasma give the possibility to estimate the therapeutic efficiency, and also predict the complication of AIP.

Соціально-гуманітарні аспекти розвитку сучасного суспільства : матеріали IV Всеукраїнської наукової конференції викладачів, аспірантів, співробітників та студентів факультету іноземної філології та соціальних комунікацій, м. Суми, 19-20 квітня 2013 р. / Відп. за вип. В.В. Опанасюк. — Суми : СумДУ, 2013. — Ч.4. — С. 47.