

THE TRACE ELEMENT BLOOD COMPOSITION VARIATION OF ACUTE DESTRUCTIVE PANCREATITIS

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Acute destructive pancreatitis (ADP) describes an acute inflammatory process of pancreas with autodigestion of pancreatic tissue with pancreatic necrosis and concomitant multiorgan failure.

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

Materials and methods: We have investigated 46 patients who received treatment for ADP in the 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 everyone patient from the first till the seventh day and on discharge day they had received treatment for ADP in surgical department.

Result: The average urinary diastase indexes ($M \pm m$) in the group with ADP during the first day of treatment were 981 ± 125 units, during the third day were 1273 ± 181 units, during the seventh day were 257 ± 50 units, and on discharge day were 35 ± 3 units. The average Calcium indexes ($M \pm m$) during the first day of treatment were 2.08 ± 0.08 , during the third day were 1.79 ± 0.74 , during the seventh day were 1.97 ± 0.14 , and on discharge day were 2.32 ± 0.13 . The average Potassium indexes ($M \pm m$) during the first day of treatment were 5.41 ± 0.24 , during the third day were 5.22 ± 0.18 , during the seventh day were 3.41 ± 0.12 , and on discharge day were 3.87 ± 0.21 . The average Magnesium indexes ($M \pm m$) during the first day of treatment were 1.15 ± 0.06 , during the third day were 1.39 ± 0.03 , during the seventh day were 1.20 ± 0.08 , and on discharge day were 0.81 ± 0.12 .

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 ADP.

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. 44.