УДК 616.37-002



C. R. Kazimzade

Azerbaijan State Advanced Training Institute for Doctors named after A. Aliyev, Baku, Azerbaijan

# EVALUATION OF CLINICAL SEVERITY OF PATENTS WITH ACUTE PANCREATITIS IN THE EMERGENCY DEPARTMENT

The aim — to study clinical features and diagnostic approaches in patients with acute pancreatitis in the emergency department. Materials and methods. Retrospective evaluation of patients (age ≥ 18) who were diagnosed as acute pancreatitis in Baku City Hospital N3 between 2013 and 2016 years was performed.

**Results.** Among the patients were 31 (50.8%) men and 30 (49.2%) women, the average age was  $60.6 \pm 15.4$  years. Abdominal pain and nausea were common complaints at the time of admission. Clinically, 32 (61.5%) patients were mild and 20 (38.5%) were severe. The computed tomography severity index (CTSI) was assessed in these patients. The sensitivity, specificity, positive predictive value, negative predictive value (90%, 97%, 95%, 94%) were calculated for CRSI > 3 patients for severity of pancreatitis. 50 (82%) patients were hospitalized. There was a correlation between CTSI and duration of hospitalization in these patients (p=0.001, r=0.497).

**Conclusions.** Early detection of clinical severity may provide an effective treatment approach because the acute pancreatitis clinic has different characteristics and variability. Early detection of a computed tomographic index of severity in acute pancreatitis in emergency departments contributes to an adequate choice of treatment tactics and a forecast of the duration of hospitalization of patients.

Key words: acute pancreatitis, computed tomography severity index, diagnostics.

Acute pancreatitis defined as various degrees reversible inflammation of the pancreas. This inflammatory process may be limited to the pancreas and may spread to peripancreatic tissues and other organ systems [7]. The incidence of acute pancreatitis is 38/100.000 with a mortality range from 2-10%. Mortality in severe form of acute pancreatitis can reach 25 % [4, 20]. The clinical picture varies from a mild form that responds briefly to medical treatment to severe form accompanied by systemic findings, such as sepsis and the development of multiple organ failure [18]. The diagnosis of the disease is based on: anamnestic data, physical examination, serological markers and radiological findings [22]. Treatment of acute pancreatitis includes rapid fluid resustation, enteral or parenteral feeding, use of parenteral antibiotics, and surgical debridement, necrosis, and pancreatic resection when sepsis is accompanied by multiorgan disfunction [24]. Acute pancreatitis has variable clinical features and inadequate diagnostic methods, emergency diagnosis is sometimes difficult. In addition, these variable clinical features may make

difficult to determine the appropriate treatment strategy at the time of application. In this study, we aimed to discuss the demographic and clinical characteristics, clinical outcomes and diagnostic approaches of acute pancreatitis.

*The aim* — to study clinical features and diagnostic approaches in patients with acute pancreatitis in the emergency department.

#### MATERIALS AND METHODS

Patients with acute pancreatitis diagnosed in Baku City Hospital N3 in 2013—2016 years were retrospectively reviewed. Patient files were retrieved from the hospital archive and demographic data, symptoms and findings, laboratory results, radiology reports, treatment modalities, hospitalization times and clinical outcomes required for the study were recorded in the study form. All adult patients over 18 years of age who were diagnosed with acute pancreatitis were included in the study. Acute pancreatitis was diagnosed with history, physical examination findings, laboratory and typical radiologi-

Кязімзаде Джумшуд Рамізович, лікар-хірург E-mail: jjumshud@yahoo.com

Д. Р. Кязімзаде

cal findings. The increase in serum amylase and lipase by three times the normal value (amylase > 100 U/L and lipase > 60 U/L) was considered significant for acute pancreatitis [14, 15]. Ultrasonography (USG) and abdominal computed tomography (CT) findings were evaluated in order to confirm the diagnosis and to reveal the etiology. The USG findings were evaluated in three groups as compatible, incompatible and inadequate findings for acute pancreatitis. Pancreatic edema, peripancreatic fluid collection, and decreased pancreatic parenchyma echogenicity and heterogeneity were accepted as the USG findings supporting pancreatitis [10]. Abdomen CT images were reevaluated by a radiologist who was unaware of the clinical outcome. Computed Tomography Severity Index (CT severity score-CTSI) was calculated for each patient. According to this, normal pancreas received 0 points, pancreatic expansion 1 point, peripancreatic inflammation 2 points, fluid collection in one place 3 points, two or more field fluid collections 4 points. In addition, absence of pancreanecrosis (0 points), necrosis less than 30 % (2 points), necrosis 30-50% (4 points) and more than 50% necrosis (6 points). The summary of the scores and the CTSI were determined [7, 10, 18]. Clinical severity of the patients was studied in two groups according to Atlanta criteria [6]: a) mild acute pancreatitis: minimal organ dysfunction associated with acute pancreatitis and uneventful recovery, absence of severe acute pancreatitis findings, normal contrast enhancement of pancreatic parenchyma in contrast-enhanced CT; b) severe acute pancreatitis: organ failure and/or pancreatic necrosis associated with acute pancreatitis, abscess or local complications such as pseudocysts [1, 11]. The treatment modalities (medical, surgical, and endoscopic retrograde cholangiopancreaticography (ERCP)) that were performed during the hospitalization period were reviewed. The finalization of the patients was evaluated as healing, discharge and death. The length of stay at the hospital was calculated in days. Statistical analyzes of the data obtained in the study were made using the SPSS 13.0 program. Mann-Whitney U test, Spearman correlation analysis and Fisher-exact test were used in the evaluation of the data. The data are given in median (minimum-maximum) and percentages. Statistical significance level was taken as p < 0.005.

### RESULTS

Acute pancreatitis was diagnosed in 61 patients in emergency department. 31 (50.8 %) of the patients were

male, 30 (49.2%) were female, aged between 25 and 90 years, and the mean age was  $60.6 \pm 15.4$ . The complaints of the patients at the time of admission were examined, 60 (98%) patientshad abdominal pain, 53 (86.9%) patients nausea and 27 (44.3%) patients vomiting.

Other signs and symptoms of the patients are shown in table 1.

The etiology of acute pancreatitis was analysed 53 (86.8%) patients had known biliary causes, 2 (3.27 %) had metabolic causes, 4 (6.55 %) had alcoholism, and 2 (3.27%) patients had unknown cause. When laboratory results were examined, amylase values were found higher in 55 (90.1%) patients and lipase values higher than 60 U/L in 58 (95.1%) patients. For diagnostic purposes abdominal USG in emergency department was performed in all patients Only 12 (19.6%) of the patients were compatible with pancreatitis while 29 (47.5%) patients were incompatible. For the reason of inadequate imaging the pancreas could not be assessed clearly in 20 (32.7 %) patients. In 52 (85.2%) patients abdominal CT scans were performed. CT findings were interpreted characteric for pancreatitis in 42 (68.8%) patients and in 10 (16.39%) patients CT findings were normal (Table 2). Dynamic follow-up CT was performed in 43 (70.4%) patients, who were admitted to the hospital. In addition, all of the 52 (85.2%) patients who underwent emergency CT scans CTSI was computed. The CTSI distribution of these patients is shown in Table 3.

Clinical severity of 52 (85.2%) patients was evaluated respectively Atlanta criteria. 9 (14.75%) patients who were not able to determine clinical severity were not evaluated. In 32 (52.45%) is evaluated patients was clinically mild, and in 29 (47.5%) severe degree of

T a b 1 e 1 Symptoms of the patients with acute pancreatitis (n = 61)

Symptoms	Patients
Abdominal pain	60 (98.0%)
Nausea	53 (86.9%)
Vomiting	27 (44.3%)
Abdominal sensitivity	58 (95.1%)
Abdominal wall defence	24 (26.2%)

Table 2

		Laboratory and radiologic findings in acute pancreatitis (n = 61)		
	Amylase (n=61)	Lipase (n=61)	USG (n=61)	CT (n=52)
Acute pancreatitis	55 (90.4%)	58 (96.1%)	12 (19.7%)	42 (80.8%)
Other pathology	6 (9.6%)	3 (4.9%)	49 (80.3%) *	10 (19.2%)

\* Incompatible for acute pancreatitis and inadequate imaging.

	T a b l e $3$ CTSI scores of patients (n = 52)
CTSI	Patients
0	8 (15.4%)
1	4 (7.7%)
2	12 (23.1%)
3	9 (17.3%)
4	10 (19.2%)
5	2 (3.8%)
6	3 (5.8%)
7	1 (1.9%)
8	3 (5.8%)

desaese. Definition of severe acute pancreatitis in CTSI > 3, sensitivity was calculated as 90% with 94% accuracy, 93.9% as negative predictive value, 93.9% as positive predictive value, and 94.7% as positive predictive value. Specificity was 96.9%, negative predictive value was 93.9%, and positive predictive value was 94.7% (Figure).

11 (18%) patients were referred to another health care facility and 50 (82%) were hospitalized to our hospital General Surgery Department. Medical treatment was applied to 28 (56%) of the patients admitted to the hospital, surgical treatment was applied to 17 (34%) and ERCP was applied to 5 (10%). 47 of

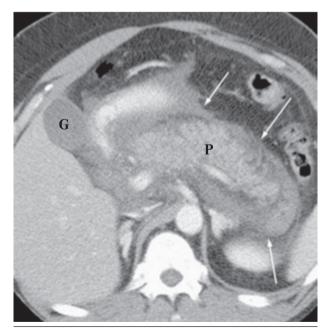


Figure. CT showing acute interstitial pancreatitis with diffuse swelling of the pancreas (white arrows): G - gallbladder; P - pancreas

these patients were discharged with healing, death was obtained in 3 (6%) patients. One of these patients, with severe pancreatitis were associated with diabetic ketoacidosis, and in another patient developed multiple organ failure. Gastrointestinal bleeding was the cause of death in third patient with mild severity of pancreatitis. Patients' median hospitalization time was 9 days (2-61 days). In addition, the number of patients who were calculated CTSI was 43 (86 %). There was a correlation between the CTSI of these patients and their hospitalization time (p = 0.001, r = 0.497). However, no significant correlation was found between CTSI and amylase and lipase values of the patients (p > 0.05). In addition, there was no statistically significant correlation between the amylase and lipase values and length of stay of the patients (p > 0.05).

#### DISCUSSION

Acute pancreatitis is one of the major clinical problems that should be considered in the differential diagnosis of patients presenting to the emergency department with abdominal pain. Clinical symptoms and signs of acute pancreatitis may vary, especially depending on age and severity of the disease. Sudden onset of epigastric and periumbilical pain, nausea, vomiting, abdominal distension and muscle rigidity are common symptoms and signs [4, 16]. Epigastric pain is the most common symptom of the disease. This pain is usually continuous, boring and can spread to the back, biceps, chest, and upper abdomen. Although the pain is often severe, it does not correlate with the severity of the disease [5]. The severity of the disease can range from mild glandular edema to intense necrosis and bleeding [13]. In our study, clinical symptoms and findings (Table 1) were similar to the literature

There are different causes in acute pancreatitis etiology. Bile duct stones and alcohol are responsible for 90% of etiologic cases. Other causes include abdominal trauma, hypertriglyceridemia, pancreas and ampulla Vater tumor, drugs, hypothermia, infectious causes, endoscopic retrograde cholangiography or other upper abdominal surgical procedures. No cause is found in up to 10% of patients [4, 20]. According to the literature review conducted by M.J. Di Magno et al. [9], acute pancreatitis is the most common in the sixth decade and alcohol (3.0-66.0%), bile duct stones (10.8-56.0%)and idiopathic causes (8.0-44.0%) were most common causes of acute pancreatitis. In this study, idiopathic causes were the leading cause in England while alcohol was the first in other European countries. Aytenet all study show that biliary causes (64.3%) and idiopathic causes (24.6%) were in the first two ranks [2]. In our study, the mean age of the patients was 60.6 years. Bile duct stones were the most common etiologic causes.

Diagnosis of acute pancreatitis can sometimes be difficult because the acute pancreatitis clinic has variable characteristics and there are factors limiting the diagnostic methods. Currently, different parameters are used in the diagnosis and follow up of acute pancreatitis. Blood and urine amylase, serum lipase, serum elastase 1, serum trypsin and serum phospholipase  $A_2$ , C-reactive protein, interleukin 6—8 and procalcitonin levels may increase in acute pancreatitis. Serum lipase elevation is more specific than amylase elevation [5, 7, 16]. As in our study, many investigators currently accept serum amylase and lipase levels as diagnostic for acute pancreatitis, which is 3 times higher than normal [6, 17]. The sensitivity of blood amylase value in acute pancreatitis diagnosis was 67–100 % and the specificity was 85–98 %. The sensitivity of the lipase value is 82–100 % and the specificity is 82–100 % [16]. In our study, three times higher amylase level was found in 55 (90.4 %) and elevated lipase values in 58 (95.1 %) of the patients.

Interstitial edema, diffuse enlargement of the pancreas, bleeding areas, pancreatic necrosis, intraperitoneal and extraperitoneal fluid collections and pseudocysts can be seen in USG during the first 48 hours in patients with acute pancreatitis. Acute cholecystitis, hepatic abscess, bile duct stones and paralytic ileus can also be detected. The rate of the pancreasimaging is 62-90% [10, 16]. In our study, USG was performed in all cases and 19.7% of the cases were found compatible to the pancreatitis, whereas in 47.5% cases, the pancreas was interpreted as normal. In addition to being dependent on the specialist experience, the intestinal gas, fat tissue and retroperitoneal placement of the pancreas are often causes of inadequate imaging of the gland [5].

Contrast-enhanced CT is the gold standard in the diagnosis of acute pancreatitis and in the evaluation of patients [20]. CT defines the anatomical structures better and may reveal complications such as pancreatic inflammation and necrosis. CT is also helpful in determining clinical severity and prognosis [5, 12, 15]. The diagnostic value of CT for acute pancreatitis is 75–90 % [4]. Despite presense of acute pancreatitis, CT findings of the pancreas may be normal in 14–28 % cases. Normal pancreas is usually associated with good clinical outcome [18]. In our study, CT findings was significant in 80.8% of patients (Table 2). There are different opinions in the literature regarding the timing of CTl. J.J. De Waele et al. [8] reported that extrapancreatic inflammation, defined by CT within the first 24 hours, is a reliable indicator of disease progression and mortality. CT is not commonly recommended in patients with mild inflammation, however, CT findings may be significant in complicated ant irresponsible to the medical treatment patients [11].

Because acute pancreatitis has variable characteristics, early detection of clinical severity provides an effective treatment approach. In general, the majority of patients have clinical mild and prognosis is good. However, clinical deterioration, organ failure and death may occur in 20 % of patients [11]. If clinical severity is mild, supportive care is often adequate, but surgical intervention may be necessary in severe forms. Early detection of acute pancreatitis as a severe attack is important for appropriate treatment and good clinical outcome. The clinical severity of acute pancreatitis should be determined concurrently with the diagnosis. Possible complications can be identified with close follow-up of the patients [19]. However, it should not be forgotten that close follow-up is required for patients who are defined as low severity at first evaluation because clinical severity may increase. In our study, patients were studied in two groups according to clinical severity. In our study, 1 patient who died while lying in the hospital was found to have a severe clinic, while the clinical severity of the patient was mild. Serum amylase and lipase levels were not correlated with clinical severity [5]. In a similar study, the relationship between clinical severity and amylase and lipase values was not significant. G. Gürleyik et al. [11] reported that patients with severe forms of acute pancreatitis were more likely to have a longer hospital stay than mild ones. Moreover, in this study, there was no difference between the ages of both groups. However, in our study, no significant difference was found in terms of the length of stay in both groups. Interestingly, the age of the severe acute pancreatitis group was found to be lower and this result was statistically significant.

Various scoring systems are used to determine the clinical severity and prognosis at early stage of acute pancreatitis. These include the Ranson criteria, the Acute Physiology and Chronic Health Evaluation (APACHE) II score, the Multiple Organ System Score (MOSS), Modified Glasgow and CTSI [1, 11, 12, 21, 23]. Ranson criteria are frequently used in these scoring systems. Ranson criteria is a reliable indicator of the clinical severity and prognosis of acute pancreatitis [1]. Although similar follow-up parameters are used inother score systems, their activities are different. S. L. Taylor et al. [21] compared the scoring systems at the time of admission in patients with acute pancreatitis. In this study Glasgow and MOSS criteria were reported to be superior to Ranson and APACHE II scores in determining the clinical outcome. These scores were not used because our data did not adequately reflect our patients. Similarly, many researchers in the literature use the revised Atlanta criteria for determining the clinical severity of acute pancreatitis. Ranson score  $\geq$  3 according to Atlanta criteria and  $\geq$  8 APACHE II score are defined as severe pancreatitis [6]. In our study, we used CTSI, which is a scoring system based on the results of CT, commonly used in the evaluation of the patients in the emergency departments. CTSI defined by E. J. Baltazar et al., provides a standardized rating according to the CT findings of acute pancreatitis. This scoring system describes clinical severity of pancreatic inflammation and necrosis grade [3]. Patients with a CTSI > 3 similar to the results of our study were reported as severe acute pancreatitis [1, 11]. In our study, the CTSI score of patients with severe clinic was higher than those with mild clinic. In addition, there was a significant correlation between BCS scores and length of stay in patients with CT and in our hospital. It has been reported that early detection of CTSI is an important prognostic indicator in determining complications and mortality [23]. Since the number of patients who died in our study was low, the relation between CTSI and mortality was not assessed. P. W. Vriens et al. Found a good correlation (r = 0.94) between the CTSI and Ranson criteria. They also reported that as well as demonstrating complications and mortality CTSI calculating within the first 48 hours after admission may be a better prognostic indicator than Ranson critera, for its practicality and may be meaningful in defining the treatment strategy [23]. According to the results of our study, it was determined that surgical drainage was performed only in patients with severe clinic and ERCP was performed in mild disease. According to these results, the diagnosis of clinical severity may contribute to the establishment of the treatment plan and the decision to hospitalization to the intensive care unit. Despite the controversies in the diagnosis of acute pancreatitis in emergency depart-

Conflicts of interest: none.

References

- Alhajeri A., Erwin S. Acute pancreatitis: value and impact of CT severity index // Abdom. Imaging. – 2008. – Vol. 33. – P. 18–20.
- Ayten R., Çetinkaya Z., Yeniçerioğlu A. Akut pankreatitli olgularimizin retrospektif değerlendirilmesi // F.Ü. Sağ. Bil. Derg. – 2007. – Vol. 21. – P. 133–136.
- Balthazar E. J., Robinson D. L., Megibow A. J., Ranson J. H. Acute pancreatitis: value of CT in establishing prognosis // Radiol.— 1990.— Vol. 174.— P. 331—336.
- Banks P. A., Freeman M. L. Practice guidelines in acute pancreatitis // Am. Gastroenterol. – 2006. – Vol. 101. – P. 2379–2400.
- Bollen T. L. Imaging of acute pancreatitis: update of the revised Atlanta classification // Radiol. Clin. N. Am. – 2012. – Vol. 50 (3). – P. 429–445.
- Bollen T. L., van Santvoort H. C., Besselink M. G. et al. The Atlanta Classification of acute pancreatitis revisited // Br. J. Surg. – 2008. – Vol. 95. – P. 6–21.
- Carroll J. K., Herrick B., Gipson T., Lee S. P. Acute pancreatitis: diagnosis, prognosis, and treatment // Am. Fam. Physician.— 2007.— Vol. 75.— P. 1513—1520.
- De Waele J. J., Delrue L., Hoste E. A. et al. Extrapancreatic inflammation on abdominal computed tomography as an early predictor of disease severity in acute pancreatitis: evaluation of a new scoring system // Pancreas. 2007. Vol. 34. P. 185–190.
- DiMagno M. J., DiMagno E. P. New advances in acute pancreatitis // Curr. Opin. Gastroenterol. – 2007. – Vol. 23. – P. 494–501.
- Elmas N. The role of diagnostic radiology in pancreatitis // Eur. J. Radiol. – 2001. – Vol. 38. – P. 120–132.
- Gürleyik G., Emir S., Kiliçoglu G. et al. Computed tomography severity index, APACHE II score, and serum CRP concentration for predicting the severity of acute pancreatitis // JOP. – 2005. – N 6. – P. 562–567.
- Hirota M., Takada T., Kawarada Y. et al. JPN Guidelines for the management of acute pancreatitis: severity assessment of acute pancreatitis // J. Hepatobil. Pancreat. Surg. — 2006. — Vol. 13. — P. 33—41.

ment [13], considering the benefits of CTSI, early stage CT more informative. Patients with a CTSI of 0-3 in the early phase are not required to routinely perform CT cycles during follow-up, but in cases of clinical deterioration, abscesses, pseudocysts, and other complications CT is recommended [23].

#### **CONCLUSIONS**

Use of informative diagnostic methods in emergency department is helpful for accurate and rapid diagnosis of acute pancreatitis. Early detection of clinical severity may provide an effective treatment approach because the acute pancreatitis clinic has different characteristics and variability. Early detection of a computed tomographic index of severity in acute pancreatitis in emergency departments contributes to an adequate choice of treatment tactics and a forecast of the duration of hospitalization of patients.

- Karaca E., Oktay C. Travmadışı akut pankreatitol gularında prognostik kriterlerin sonuçüzerineetkisi // Türkiye Acil Tıp Dergisi.— 2008.— N 8.— P. 18—25.
- Kaya E, Dervisoglu A, Polat C. Evaluation of diagnostic findings and scoring systems in outcome prediction in acute pancreatitis // World J. Gastroenterol. – 2007. – Vol. 13. – P. 3090–3094.
- Kim Y. S., Lee B. S., Kim S. H. et al. Is there correlation between pancreatic enzyme and radiological severity in acute pancreatitis? // World J. Gastroenterol. – 2008. – Vol. 14. – P. 2401–2405.
- Koizumi M., Takada T., Kawarada Y. et al. JPN Guidelines for the management of acute pancreatitis: diagnostic criteria for acute pancreatitis // J. Hepatobil. Pancreat. Surg. – 2006. – Vol. 13. – P. 25–32.
- Lankisch P.G., Burchard-Reckert S., Lehnick D. Underestimation of acute pancreatitis: patients with only a small increase in amylase/ lipase levels can also have or develop severe acute pancreatitis // Gut. – 1999. – Vol. 44. – P. 542–544.
- Maher M. M., Lucey B. C., Gervais D. A., Mueller P. R. Acute pancreatitis: the role of imaging and interventional radiology // Cardiovasc. Intervent. Radiol. – 2004. – Vol. 27. – P. 208–225.
- Pezzilli R., Uomo G., Zerbi A. et al. Diagnosis and treatment of acute pancreatitis: the position statement of the Italian Association for the study of the pancreas // Dig. Liver. Dis. – 2008. – Vol. 40. – P. 803–808.
- Sargent S. Pathophysiology, diagnosis and management of acute pancreatitis // Br. J. Nurs. – 2006. – Vol. 15. – P. 999–1005.
- Taylor S. L., Morgan D. L., Denson K. D. et al. A comparison of the Ranson, Glasgow, and APACHE II scoring systems to a multiple organ system score in predicting patient outcome in pancreatitis // Am. J. Surg. – 2005. – Vol. 189. – P. 219–222.
- Vlodov J., Tenner S. M. Acute and chronic pancreatitis // Prim. Care. – 2001. – Vol. 28. – P. 607–628.
- Vriens P. W., van de Linde P., Slotema E. T. et al. Computed tomography severity index is an early prognostic tool for acute pancreatitis // J. Am. Coll. Surg. – 2005. – Vol. 201. – P. 497–502.
- Yousaf M., McCallion K., Diamond T. Management of severe acute pancreatitis // Br. J. Surg. – 2003. – Vol. 90. – P. 407–420.

#### Д. Р. Кязімзаде

Азербайджанський державний інститут удосконалення лікарів імені О. Алієва, Баку, Азербайджан

## ОЦІНКА КЛІНІЧНОЇ ТЯЖКОСТІ У ХВОРИХ НА ГОСТРИЙ ПАНКРЕАТИТ У ВІДДІЛЕННІ НЕВІДКЛАДНОЇ ДОПОМОГИ

**Мета роботи** — вивчити клінічні особливості й діагностичні підходи у хворих з гострим панкреатитом у відділенні невідкладної допомоги.

Матеріали і методи. Проведено ретроспективне дослідження пацієнтів віком ≥18 років, у яких був діагностований гострий панкреатит, госпіталізованих у міську клінічну лікарню № 3 м. Баку в період між 2013 і 2016 р.

**Результати та обговорення.** Серед хворих були 31 (50,8%) чоловік і 30 (49,2%) жінок, середній вік — (60,6 ± 15,4) року. Біль у животі і нудота були поширеними скаргами під час прийому. Клінічний стан у 32 (61,5%) хворих був помірно тяжким, а у 20 (38,5%) хворих — тяжким. У всіх цих хворих був визначений комп'ютерно-томографічний індекс тяжкості (KTIT). У хворих з KTIT > 3 були визначені чутливість, специфічність, позитивне і негативне прогностичне значення (90%, 97%, 95%, 94% відповідно). 50 (82%) пацієнтів були госпіталізовані. Спостерігалася кореляція між KTIT і тривалістю госпіталізації (p = 0,001; r = 0,497).

Висновки. Використання інформативних методів діагностики у відділеннях невідкладної допомоги сприяє точній і швидкій діагностиці гострого панкреатиту. Раннє визначення комп'ютерно-томографічного індексу тяжкості при гострому панкреатиті у відділеннях невідкладної допомоги сприяє адекватному вибору тактики лікування та прогнозу тривалості госпіталізації хворих.

Ключові слова: гострий панкреатит, комп'ютерно-томографічний індекс тяжкості, діагностика.

#### Д. Р. Кязимзаде

Азербайджанский государственный институт усовершенствования врачей имени А. Алиева, Баку, Азербайджан

## ОЦЕНКА КЛИНИЧЕСКОЙ ТЯЖЕСТИ У БОЛЬНЫХ ОСТРЫМ ПАНКРЕАТИТОМ В ОТДЕЛЕНИИ НЕОТЛОЖНОЙ ПОМОЩИ

**Цель работы** — изучить клинические особенности и диагностические подходы у больных острым панкреатитом в отделении неотложной помощи.

Материалы и методы. Проведено ретроспективное исследование пациентов в возрасте ≥ 18 лет, у которых был диагностирован острый панкреатит, госпитализированных в городскую клиническую больницу № 3 г. Баку в период между 2013 и 2016 г.

Результаты и обсуждение. Среди больных были 31 (50,8%) мужчина и 30 (49,2%) женщин, средний возраст — (60,6  $\pm$  15,4) года. Боль в животе и тошнота были распространенными жалобами во время приема. Клиническое состояние у 32 (61,5%) больных было умеренно тяжелым и у 20 (38,5%) больных — тяжелым. У всех этих больных был определен компьютерно-томографический индекс тяжести (КТИТ). У больных с КТИТ > 3 были определены чувствительность, специфичность, положительная и отрицательная прогностическая значимость (90%, 97%, 95%, 94% соответственно). 50 (82%) пациентов были госпитализированы. Наблюдалась корреляция между КТИТ и продолжительностью госпитализации (p = 0,001; r = 0,497).

**Выводы.** Использование информативных методов диагностики в отделениях неотложной помощи способствует точной и быстрой диагностике острого панкреатита. Раннее определение компьютерно-томографического индекса тяжести при остром панкреатите в отделениях неотложной помощи способствует адекватному выбору тактики лечения и прогнозу продолжительности госпитализации больных.

Ключевые слова: острый панкреатит, компьютерно-томографический индекс тяжести, диагностика.