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MedEst|2026 | Vol.6: e471| ISSN: 2789-7567 |RNPS: 2524| NARRATIVE REVIEW ARTICLE

Clinical manifestations of acute pancreatitis: a narrative review of the literature

Manifestaciones clínicas de la pancreatitis aguda: revisión narrativa de la literatura

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Palabras Clave: Dolor abdominal; Páncreas; Pancreatitis aguda; Síndrome de abdomen agudo; Manifestaciones clínicas.

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RESUMEN

Introducción: La pancreatitis aguda es una entidad de alta frecuencia que complica el flujo diagnóstico-terapéutico por su heterogeneidad clínica y potencial de complicaciones graves. **Objetivo:** analizar críticamente las manifestaciones clínicas más frecuentes reportadas en la literatura reciente sobre pancreatitis aguda. **Métodos:** Revisión narrativa con búsqueda en español e inglés (diciembre 2025) en PubMed, Scopus, SciELO, Cochrane Library y Google Scholar. Se seleccionaron 42 artículos (metaanálisis, ensayos clínicos, guías clínicas y estudios observacionales) publicados preferentemente en los últimos cinco años, con diagnóstico basado en criterios de Atlanta. La información se organizó por ejes temáticos. **Desarrollo:** El dolor abdominal (97-100 %), las náuseas (50-80 %) y los vómitos (71-80 %) son los síntomas cardinales. El síndrome de respuesta inflamatoria sistémica (SRIS) se asocia a mayor riesgo de gravedad (OR=1,99; IC95 %:1,46-2,72). La ictericia (11-28 %) es un fuerte predictor de etiología biliar. La masa palpable (<3 %) sugiere pseudoquiste o necrosis encapsulada. Los signos de Cullen y Grey-Turner (<3 %) indican formas necrohemorrágicas y mal pronóstico. El SRIS persistente (>48 horas) y el fallo orgánico definen la pancreatitis grave. **Conclusiones:** El reconocimiento temprano del dolor abdominal, náuseas y vómitos, junto con la identificación de SRIS, ictericia, reacción peritoneal o masa palpable, permite estratificar el riesgo, iniciar manejo multidisciplinario precoz y reducir la morbimortalidad asociada.

ABSTRACT

Introduction: Acute pancreatitis is a common condition that complicates the diagnostic and therapeutic process due to its clinical heterogeneity and potential for serious complications. **Objective:** To critically analyze the most frequent clinical manifestations reported in the recent literature on acute pancreatitis. **Methods:** A narrative review was conducted using a search in Spanish and English (December 2025) in PubMed, Scopus, SciELO, the Cochrane Library, and Google Scholar. Forty-two articles (meta-analyses, clinical trials, clinical guidelines, and observational studies) were selected, preferably published within the last five years, with diagnoses based on Atlanta criteria. The information was organized by thematic areas. **Results:** Abdominal pain (97-100 %), nausea (50-80 %), and vomiting (71-80 %) are the cardinal symptoms. Systemic inflammatory response syndrome (SIRS) is associated with a higher risk of severity (OR=1.99; 95 % CI: 1.46-2.72). Jaundice (11–28 %) is a strong predictor of biliary etiology. A palpable mass (<3 %) suggests a pseudocyst or encapsulated necrosis. Cullen's and Grey-Turner's signs (<3 %) indicate necrohemorrhagic forms and a poor prognosis. Persistent SIRS (>48 hours) and organ failure define severe pancreatitis. **Conclusions:** Early recognition of abdominal pain, nausea, and vomiting, along with the identification of SIRS, jaundice, peritoneal reaction, or a palpable mass, allows for risk stratification, early initiation of multidisciplinary management, and a reduction in associated morbidity and mortality.

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INTRODUCTION

Acute pancreatitis (AP) is defined as an acute inflammatory process of the pancreas with a broad clinical spectrum that can progress from self-limited forms to severe cases with local injury, systemic inflammatory response syndrome (SIRS), organ failure, and death [1,2]. It constitutes one of the leading causes of hospital admission due to gastrointestinal pathology worldwide, with a growing health and economic impact [3,4].

In recent decades, a global increase in its incidence has been observed. Between 1990 and 2019, the worldwide incidence of AP rose by 62,9 %, from 1 727 789,3 to 2 814 972,3 cases [5]. The global annual incidence is estimated at 33,74 patients (95 % CI: 23,33-48,81) per 100 000 person-years, with a mortality rate of 1,60 (95 % CI: 0,85-1,58) per 100 000 person-years [6]. Worldwide incidence varies between 5 and 80 per 100 000 inhabitants, depending on the region and associated risk factors [7].

Approximately 60 % of episodes in women are of biliary origin; of the remaining 40 %, most are attributed to alcoholism in men, and between 5 % and 10 % to other etiologies such as hypertriglyceridemia, infections, endoscopic procedures, trauma, toxins, metabolic disorders, or drugs [8]. Overall mortality ranges from 1 % to 5 %, but increases to 5-10 % in severe presentations complicated by necrosis, hemorrhage, sepsis, or multiorgan failure [9]. In severe forms, mortality can reach 30 %. Approximately 80 % of cases are mild, while between 15 % and 25 % progress to moderately severe or severe forms [10,11].

In Cuba, AP represents a variable proportion of admissions for pancreatic diseases and is considered a clinical-surgical emergency with a high rate of intensive care unit admission. When surgical intervention is required, mortality can reach considerable figures. Diagnosis requires meeting at least two of three criteria: typical abdominal pain, elevation of serum amylase or lipase more than three times the upper normal limit, and compatible imaging findings [12,13,14].

The classic presentation begins with pain in the epigastrium or hypochondria that radiates in a band-like fashion to the flanks or back, frequently accompanied by vomiting in the first few hours and, in some cases, paralytic ileus [15]. Manifestations such as symptomatic hypocalcemia, Cullen's sign or Grey-Turner's sign, Purtscher's retinopathy, panniculitis, or pancreatic encephalopathy are uncommon and usually indicate severe forms [16,17]. In clinical practice, timely semiological recognition is key to reducing diagnostic delays, initiating

early intensive management, and preventing complications such as infected necrosis or multiorgan failure [18].

Given the heterogeneity of the clinical spectrum and the need to integrate findings from different study designs (case series, cohorts, clinical guidelines), a narrative review allows for a more flexible synthesis oriented toward daily clinical practice, in contrast to the methodological rigidity of a systematic review.

Therefore, this review aims to critically analyze the most frequent clinical manifestations reported in the recent literature on AP.

METHODS

A narrative literature review was conducted during December 2025. The search was carried out in the following databases and academic search engines: PubMed, Scopus, Web of Science, SciELO, LILACS, Cochrane Library, Google Scholar, Dialnet, ClinicalKey, and Embase. No language restrictions were applied, although documents published in Spanish and English were prioritized.

The following search terms (DeCS/MeSH and free words) were used in various combinations using Boolean operators: "acute pancreatitis", "pancreatitis aguda", "clinical manifestations", "cuadro clínico", "abdominal pain", "dolor abdominal", "vomiting", "vómitos", "signs of severity", "signos de gravedad", "systemic inflammatory response syndrome", "SIRS", "jaundice", "ictericia", "Cullen sign", "Grey Turner sign", "local complications", "pancreatic pseudocyst". The search was complemented by manually reviewing the reference lists of the key articles identified.

The publication period considered was preferably the last five years (2021-2026). Exceptionally, foundational classic articles (before 2021) were included due to their historical semiological value and because they describe infrequent manifestations for which recent evidence is scarce (e.g., Cullen's sign, Grey-Turner's sign, original Atlanta classification).

Inclusion criteria: Studies conducted in humans, aged ≥18 years. Diagnosis of acute pancreatitis based on at least two of the three revised Atlanta classification criteria (typical abdominal pain, elevation of amylase or lipase ≥3 times the upper normal limit, compatible imaging findings). Study designs: meta-analyses, randomized clinical trials, clinical practice guidelines, systematic reviews, cohort studies (prospective or retrospective), case-control studies, case series (≥10 patients), and cross-sectional studies. Articles reporting frequencies, semiological characteristics, clinical predictors, or signs of severity of

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acute pancreatitis. Publication within the last five years (2021-2026), with the exception of foundational classic articles justified in the previous section.

Exclusion criteria: Studies with a sample size of fewer than 10 patients (except for single case reports of extremely rare manifestations, which were used only as contextual reference and not for estimating frequencies). Articles focusing exclusively on chronic pancreatitis without an acute episode. Experimental animal studies or in vitro models. Letters to the editor, editorials, non-systematic expert opinions, or conference abstracts without full text available. Articles whose full text was not accessible after arranging interlibrary loan (in which case the lack of access was documented).

Source selection process

The initial identification retrieved 186 documents after removing duplicates. Two authors (WERA and SRSJ) independently performed title and abstract screening. Disagreements were resolved by consensus and, when not possible, with the participation of the third author (RJAP). Subsequently, the full text of 62 preselected articles was assessed. Finally, 42 articles meeting all eligibility criteria were included. A PRISMA flowchart was not applied given the narrative nature of the review, but a written record of inclusion/exclusion decisions was kept.

Data extraction and synthesis

A data extraction form was designed in a spreadsheet (Excel) that included the following variables: author(s), year of publication, country, study design, sample size, population characteristics (age, sex, etiology), reported clinical manifestations, frequencies (%) or measures of association (odds ratio, relative risks, confidence intervals), level of evidence according to the Oxford classification (1a to 5), and main conclusions of the authors.

The synthesis was organized by thematic axes: (a) predominant gastrointestinal symptoms; (b) signs of severity and systemic involvement; (c) manifestations guiding etiology or local complications; (d) infrequent manifestations with poor prognosis. Each axis was structured combining pathophysiological description, reported frequency, and clinical relevance, prioritizing the highest level of evidence (meta-analyses, clinical trials, guidelines) when available, without excluding well-designed observational studies in areas with scarce high-level evidence (e.g., Cullen's and Grey-Turner's signs).

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Given the narrative approach, a systematic risk of bias assessment of primary studies nor a meta-analysis was performed. A search of clinical trial registries was not conducted, nor was grey literature included (unpublished theses, technical reports, non-indexed conference proceedings). These limitations are inherent to the narrative design and are explicitly acknowledged in the discussion.

DEVELOPMENT

Epidemiology and initial considerations

AP is one of the most frequent gastrointestinal conditions requiring hospitalization [20]. Its global incidence has shown a sustained increase, parallel to the growing prevalence of obesity, diabetes, and metabolic syndrome [7]. The main etiologies continue to be gallstone disease (38-70 % of cases) and excessive alcohol consumption (25-41 %), followed by hypertriglyceridemia (approximately 10 %) [21]. AP of hypertriglyceridemic origin has shown an increase in regions such as China, possibly associated with socioeconomic and dietary factors [22].

Predominant gastrointestinal symptoms

Abdominal pain

Abdominal pain remains the cardinal manifestation of AP, present in more than 97 % of patients. In a prospective multicenter study that included 1 432 patients, 97,3 % (n=1 394) presented with pain upon admission [23]. The pain is usually intense (70 % of cases), with abrupt onset and epigastric or hypochondriac location, with band-like radiation to the back [10]. This radiation reflects visceral innervation and distension of the pancreatic capsule due to inflammatory edema. Premature activation of trypsin and lipase generates enzymatic autodigestion, local irritation, and afferent visceral stimulation, which explains its intensity and persistent nature [20,24].

In a cohort of 86 Cuban patients, abdominal pain was present in 100 % of cases [12]. It is important to note that approximately 50,9 % of patients may present with atypical pain (non-epigastric or non-belt-like), which can hinder initial diagnosis if not accompanied by enzyme elevation. Acute stabbing pain was associated with greater severity of AP (OR=2,48; 95 % CI: 1,55-3,97) and higher mortality (OR=2,26; 95 % CI: 1,20-4,06) compared to other types of pain [23].

Nausea and vomiting

Vomiting is the second most frequent symptom, present in approximately 80 % of patients [10,25]. In the aforementioned Cuban

cohort, vomiting was reported in 77,4 % of cases [12]. Its early appearance is related to gastric and duodenal irritation, the vagal reflex due to peripancreatic inflammation, and, in some cases, incipient paralytic ileus. Occasionally, vomiting may be intractable and quickly lead to hydroelectrolyte imbalances and metabolic alkalosis [26]. The presence of nausea and vomiting, together with abdominal pain, is part of the major diagnostic criteria, and their persistence beyond the first 48 hours usually indicates an unfavorable course.

Signs of severity and systemic involvement

Systemic inflammatory response syndrome (SIRS): SIRS represents the systemic dissemination of inflammatory mediators (cytokines, free radicals, complement and coagulation activation), with increased vascular permeability, microthrombosis, and possible bacterial translocation [11,27]. Its presence is a fundamental prognostic marker of severity, as it increases the risk of organ failure and requires intensive monitoring. The mortality pattern in AP is biphasic: early mortality (first two weeks) is related to SIRS and multiorgan failure, while late mortality (after two weeks) is due to local complications such as infected necrosis and pseudocysts [10]. A recent meta-analysis including nine studies demonstrated that an elevated systemic inflammatory response index (SIRI) at admission is associated with a higher risk of severe AP (OR=1,99; 95 % CI: 1,46-2,72) [11]. The post -test probability of severe AP with positive SIRS was 40 %, dropping to 12 % when SIRS was negative [27].

Abdominal distension and paralytic ileus: Abdominal distension reflects third-space fluid shift due to increased capillary permeability, extensive retroperitoneal inflammation, and intestinal dysmotility. Although not pathognomonic, its progression usually correlates with a larger third-space volume and risk of complications. It may be accompanied by decreased or absent bowel sounds due to paralytic ileus, which requires monitoring fluid and electrolyte balance and considering nasogastric decompression in selected cases.

Fever and peritoneal reaction: Fever (up to 45 % in some series) may initially respond to the acute inflammatory response, but when persistent (>72-96 hours) or late-onset, it suggests infected necrosis or secondary collections [28]. In an Indian study of 100 patients, 45 % presented with fever [29]. Peritoneal reaction (signs of peritoneal irritation with pain on decompression, muscle guarding, and abdominal rigidity) indicates peritoneal irritation due to enzyme leakage, inflammatory exudate, or fat necrosis of the omentum and mesentery. Its detection requires ruling out moderately severe or severe forms and

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considering contrast-enhanced cross-sectional imaging and immediate multidisciplinary management.

Manifestations guiding etiology and local complications

Jaundice: Jaundice is present in a variable proportion of patients, between 11 % and 28 % according to different series [29,30]. In the context of AP, it is a strong predictor of biliary etiology due to common bile duct obstruction by stones or edema of the pancreatic head. In a classic study of 300 autopsied patients with AP, 25 % had jaundice; of these, 41,3 % had biliary tract obstruction, mainly due to stones impacted in the common bile duct or ampulla [31]. When it appears in the absence of an evident biliary cause, it suggests severe inflammation of the pancreatic head with extrinsic compression of the biliary tract, reinforcing its value as a marker of severity. Concomitant cholangitis, characterized by fever, jaundice, and abdominal pain, constitutes an emergency that requires early endoscopic retrograde cholangiopancreatography (ideally within the first 24 hours).

Palpable mass: A palpable abdominal mass is an infrequent finding, reported in case series, reflecting the formation of organized collections: pseudocyst, encapsulated necrosis, or hematoma. Pancreatic pseudocysts are complications that occur in 10-26 % of acute AP cases and up to 20-40 % of chronic pancreatitis [32]. Their detection implies extensive tissue damage and a prolonged inflammatory response, associated with a higher risk of complications and mortality. It requires confirmation by computed tomography or endoscopic ultrasound and, depending on characteristics, may indicate percutaneous, endoscopic, or surgical drainage. The current management strategy favors initial conservative management and delayed intervention (preferably after four weeks), following a step-up approach [33].

Abdominal compartment syndrome: Less frequent but extremely severe, abdominal compartment syndrome (intra-abdominal pressure >20 mmHg associated with organ dysfunction) may occur in patients with massive edema of the pancreatic bed, large collections, or tense ascites. It manifests with extreme abdominal distension, progressive oliguria, increased filling pressures, and ventilatory difficulty. Suspicion requires intra-abdominal pressure monitoring and consideration of urgent decompression measures [36].

Infrequent clinical manifestations with poor prognosis

Cutaneous ecchymotic signs: Cullen's sign and Grey-Turner's sign: Cullen's sign (periumbilical ecchymosis) and Grey-Turner's sign (flank

ecchymosis) constitute cutaneous manifestations of retroperitoneal hemorrhage in necrohemorrhagic pancreatitis. Classic literature indicates that they develop in less than 3 % of patients with AP [16,17]. However, more recent reports suggest they are observed in less than 1 % of individuals, with a clear adverse prognostic value in terms of severity and mortality [34]. The pathophysiology of Grey-Turner's sign involves the spread of hemorrhagic fluid from the posterior pararenal space to the lateral border of the quadratus lumborum muscle and subsequently to the subcutaneous tissues through a defect in the flank fascia. Cullen's sign is produced by the diffusion of retroperitoneal blood toward the falciform ligament and then into the umbilical subcutaneous tissues [16]. It is important to note that these signs are not exclusive to AP, as they may appear in other conditions such as ruptured ectopic pregnancy, aortic aneurysm, rectus abdominis hematoma, perforated duodenal ulcer, or neoplasms, so their interpretation must be contextualized [34]. Their low sensitivity and specificity make them useful findings when present, but their absence does not rule out severe forms.

Purtscher-like retinopathy: Purtscher-like retinopathy is a rare chorioretinopathy associated with AP, characterized by sudden, painless visual loss secondary to leukocytic microemboli that occlude preretinal capillaries. In a systematic review, the most frequent associated pathology was trauma, followed by AP [35]. Fundoscopic findings include diffuse bilateral flame-shaped hemorrhages and areas of retinal whitening (Purtscher flecken). Up to half of affected patients may suffer permanent visual changes, underscoring the importance of early ophthalmologic evaluation by fundoscopy in patients with severe AP and visual disturbances [35]. Its presence has been associated with higher rates of morbidity and mortality, and therefore it should be considered a systemic alarm sign.

Pancreatic panniculitis and encephalopathy: Pancreatic panniculitis consists of painful, erythematous subcutaneous nodules, usually located on the lower extremities. It is extremely rare and almost always indicates extensive pancreatic necrosis or chronic pancreatitis with pancreatic fistula [37]. Pancreatic encephalopathy is an uncommon but severe complication, manifesting with confusion, agitation, disorientation, seizures, or coma. Both are associated with severe forms and significantly worsen the prognosis [38].

Prognostic assessment and scoring systems

Early risk stratification is essential for optimizing resources and preventing complications. The most commonly used scoring systems are Ranson criteria, APACHE-II, BISAP, and the presence of SIRS. A

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systematic review and meta-analysis including 43 studies with 14 116 patients showed that the post-test probability of severe AP with a positive score was 48 % for Ranson, 47 % for BISAP, 43 % for APACHE -II, and 40 % for SIRS. When scores were negative, the probability dropped to 5-6 % for these systems, except for SIRS (12 %) [27]. However, these scoring systems have limited diagnostic performance and should not be used in isolation for decision-making, but rather integrated with clinical judgment. A more recent meta-analysis compared the diagnostic accuracy of Ranson and BISAP, finding areas under the curve (AUC) for severity of 0,95 and 0,94 respectively, with no significant differences [39]. The presence of SIRS on admission, or its persistence beyond 48 hours, remains one of the most valuable prognostic markers due to its simplicity and immediate availability.

Local and systemic complications

Local complications according to the revised Atlanta classification

The revised Atlanta classification (2012) defines four types of peripancreatic collections, differentiating between interstitial edematous pancreatitis (80-85 % of cases) and necrotizing pancreatitis (15-20 % of cases) [19]. In interstitial edematous pancreatitis, acute peripancreatic fluid collections and pseudocysts are distinguished. In necrotizing pancreatitis, acute necrotic collections and walled-off necrosis are described [40]. This distinction is crucial because collections containing necrosis have a higher risk of infection and mortality, and require a step-up therapeutic approach starting with conservative management and reserving intervention (percutaneous drainage or minimally invasive necrosectomy) after the fourth week [33,40].

Infected necrosis occurs in approximately one third of necrotizing pancreatitis cases and is associated with significant morbidity and mortality. Six randomized clinical trials with 1 045 patients compared endoscopic versus surgical necrosectomy, demonstrating comparable mortality (8-18 % vs. 6-15 %) but with a significantly lower rate of pancreatic fistula in the endoscopic group (8 % vs. 34 %; $p<0,01$) and shorter hospital stay. The optimal timing of intervention ranges from 4 to 6 weeks after the onset of pancreatitis [38]. Routine antibiotic prophylaxis is not indicated, even in cases of sterile necrosis, and should be reserved only for confirmed or highly suspected infected necrosis [39].

Systemic complications

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Persistent organ failure (>48 hours) defines severe AP and is the main determinant of prognosis. The most affected systems are the respiratory (acute respiratory distress syndrome), cardiovascular (distributive shock), and renal (acute kidney injury). Mortality in patients with organ failure is 28 % and reaches 24 % in those with infected necrosis. The combination of organ failure and infected necrosis is associated with even higher mortality (RR 3,72; p<0,0001) [41].

Clinical-therapeutic implications

Integrating these findings into daily practice allows for more precise clinical stratification. Pain, nausea, and vomiting guide initial diagnosis and early hydroelectrolyte and analgesic support. The most recent international guidelines recommend moderately aggressive fluid resuscitation with close monitoring, preferably using lactated Ringer's solution (instead of normal saline), which has been shown to reduce the incidence of SIRS and hospital stay in recent meta-analyses [42]. Analgesia should be individualized; opioids remain the mainstay of management, although non-steroidal anti-inflammatory drugs and paracetamol may be effective in mild cases [43]. Early enteral nutrition is recommended within the first 24-48 hours, preferring the oral route if tolerated, or nasogastric/nasojejunal otherwise [20].

The appearance of SIRS, jaundice, peritonism, or a palpable mass should activate severity protocols, advanced imaging evaluation (helical computed tomography with intravenous contrast, preferably performed between 72 and 96 hours after admission if the patient does not improve or meets severity criteria), and referral to intensive care units or surgery [44]. The multidisciplinary approach (internal medicine, gastroenterology, surgery, intensive care, interventional radiology, and nutrition) remains the most effective strategy to reduce complications and improve prognosis [1,4,12,18].

The 2025 guidelines of the International Association of Pancreatology address 18 domains with 96 questions, covering practically all aspects of AP management, including pain control, fluid therapy, patient stabilization, nutritional support, conservative and interventional management of infected necrotizing pancreatitis, management of complications, discharge criteria, and recurrence prevention strategies [1,6]. These guidelines also identify areas for future research, mainly targeted therapies to control systemic inflammation and mitigate organ dysfunction [1].

DISCUSSION

Main interpretation of findings

This narrative review confirms that abdominal pain remains the cardinal symptom of AP, present in virtually all patients, and that when accompanied by nausea and vomiting it constitutes a highly suggestive syndromic pattern. Discrimination between mild and severe forms is fundamentally based on the presence of persistent SIRS, signs of peritoneal irritation, or incipient organ failure. Infrequent manifestations such as Cullen's and Grey-Turner's signs, despite their low prevalence (<3 %), remain relevant due to their high specificity for necrohemorrhagic forms and their adverse prognostic value.

Comparison with the international literature

The frequencies of clinical manifestations found in this review are consistent with those reported in the international literature. Abdominal pain is cited as the most frequent symptom in most clinical guidelines and systematic reviews [1,7,10,20]. However, the prevalence of SIRS in this review (13,6 % in the primary studies analyzed) may be underestimated compared to the incidence published in large international cohorts, where it is reported in up to 25-30 % of admitted AP patients. This difference could be explained by the predominant inclusion of mild to moderate patients in the selected Latin American studies. A recent meta-analysis found that the pretest probability of severe AP ranged from 16,6 % to 25,3 %, with a post-test probability of 40 % when SIRS was positive [27]. Elevated systemic inflammatory response index (SIRI) at admission has been correlated with a higher risk of severe AP in more recent studies [11].

Regarding jaundice as a marker of biliary etiology, the findings of this review (11-28 %) are comparable to those described in the classic and contemporary literature. A 1987 study of 75 patients with AP and jaundice found that 41,3 % had common bile duct obstruction, mainly due to stones [31]. More recent data confirm that acute biliary pancreatitis accounts for 35 % to 60 % of all AP cases, and that liver function tests may be normal in up to 14,5 % of patients with biliary etiology [45].

Limitations of the reviewed evidence

The available evidence on clinical manifestations of AP has important limitations. First, single-center, retrospective, observational studies with modest sample sizes predominate, introducing selection, information, and recall biases. Many series do not use the revised Atlanta classification in a standardized manner, making comparison between studies difficult. Second, most research focuses on hospital

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populations, excluding patients with mild forms who do not require admission, which may overestimate the frequency of severe manifestations. Third, the lack of consensus on the operational definition of certain signs (such as peritoneal reaction or palpable mass) introduces heterogeneity in reports. Fourth, there is a scarcity of multicenter, prospective Latin American studies that correlate clinical manifestations with objective biomarkers (CRP, procalcitonin, IL-6) or with internationally validated prognostic scores, limiting the regional applicability of the conclusions.

Limitations of this narrative review

This review also has limitations inherent to its narrative design. The search, although systematic, did not follow PRISMA criteria for systematic reviews, so the comprehensiveness of the inclusion of all relevant studies cannot be guaranteed. No formal risk of bias assessment of primary studies nor a meta-analysis was performed, so the pooled frequencies should be interpreted with caution. The inclusion of older (classic) literature to describe infrequent signs may not reflect changes in epidemiology and current management. Likewise, reliance on the authors' criteria for the selection and ranking of sources introduces a possible selection bias, recognized and accepted in narrative reviews. The absence of a search in clinical trial registries (ClinicalTrials.gov) and the exclusion of grey literature constitute additional restrictions.

Implications for clinical practice and future research

Despite these limitations, this review offers a practical framework for semiological stratification of AP that is applicable in resource-limited settings, such as many Latin American hospitals. The main message is that the absence of SIRS, peritoneal signs, and jaundice does not ensure a benign course; continuous monitoring during the first 72 hours is required, a period in which most severe complications manifest.

For future research, multicenter prospective studies in Latin America are needed that: 1) standardize clinical data collection using the revised Atlanta classification; 2) incorporate inflammatory biomarkers (CRP, procalcitonin, interleukins) and prognostic scores (Ranson, APACHE-II, BISAP) to validate them in the regional population; 3) evaluate the utility of point-of-care clinical ultrasound for early detection of peripancreatic collections; 4) investigate the prognostic value of new indices such as the systemic inflammatory response index (SIRI); and 5) analyze the impact of early nutritional interventions and

multimodal analgesia on symptom evolution and subsequent quality of life.

CONCLUSIONS

The clinical manifestations of acute pancreatitis enable early prognostic stratification. Abdominal pain and vomiting are cardinal symptoms, while persistent SIRS, jaundice, and Cullen´s or Grey-Turner´s signs indicate severity. Continuous clinical evaluation and multidisciplinary approach are essential to reduce complications and mortality.

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AUTHORSHIP CONTRIBUTIONS

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WERA: Conceptualization, formal analysis, methodology, project management, drafting, revision, and editing.

SRSJ: Conceptualization, data curation, research, supervision, and drafting.

RJAP: Conceptualization, data curation, research, supervision, and drafting.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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USE OF ARTIFICIAL INTELLIGENCE

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