Recent Management Of Acute Pancreatitis In I.C.U

Essay

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بسم الله الرحمن الرحيم

قالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا

عَلَّمْتَنَا إِنَّكَ أَنتَ الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم

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Marwa Gouda Matbolley

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List of Abbreviations

ACS	:	Abdominal Compartment Syndrome
AIDS	:	Autoimmune deficiency syndrome
AIP	:	Autoimmune pancreatitis
AKI	:	Acute kidney injury
ALT	:	Alanine Aminotransferase
ANC	:	Acute necrotic collection
ANS	:	Autonomic nervous system
AP	:	Acute pancreatitis
APACHE	:	Acute physiology and chronic health evaluation
APFC	:	Acute peripancreatic fluid collections
aPTT	:	Activated Partial thromboplastin time
ARDS	:	Acute respiratory distress syndrome
AST	:	Aspartate aminotransferase
AT	:	Antithrombin
BISAP	:	Bedside index of severity in acute pancreatitis
BMI	:	Body mass index
BUN	:	Blood urea nitrogen
CBD	:	Common bile duct
CCK	:	Cholecystokinin

List of Abbreviations (Cont.)

CECT	:	Contrast-enhanced abdominal computed tomography
CFTR	:	Cystic fibrosis transmembrane conductance regulator gene
CLDN2	:	claudin-2
CMV	:	Cytomegalo virus
CPA	:	Carboxypeptidase A
CPAP	:	Continuous positive airway pressure
CRP	:	C-reactive protein
CT	:	Computed tomography
CTRC	:	Chymotrypsinogen C
DIC	:	Disseminated intravascular coagulation
DVT	:	Deep venous thrombosis
EBV	:	Epstein-Barr virus
ERCP	:	Endoscopic retrogeade cholangiopancrea-tography
EUS	:	Endoscopic ultrasonography
FDP**s**	**:**	Fibrin degradation products
FFA	:	Free fatty acids
FiO_2	:	Fraction of inspired oxygen
FNA	:	Fine needle aspiration

List of Abbreviations (Cont.)

GIT	:	Gastrointestinal tract
HCT	:	Hematocrit
HTG	:	Hypertriglyceridemia
HTGP	:	Hypertriglyceridemia pancreatitis
IAP	:	Idiopathic acute pancreatitis
ICAM	:	Intercellular adhesion molecules
ICDC	:	International Consensus Diagnostic Criteria
ICU	:	Intensive care unit
IgG4	:	Immunoglobulin G 4
IL	:	Interleukin
INR	:	International normalized ratio
IPMN	:	Intraductal papillary-mucinous neoplasm
IV	:	Intravenous
JSS	:	Japanese Severity Score
KDIGO	:	Kidney Disease Improving Global Outcomes
LDH	:	Lactate dehydrogenase
MAP	:	Mean arterial pressure
MODS	:	Multiple organ dysfunction syndrome
MRCP	:	Magnetic resonance cholangiopancrea-tography
MRI	:	Magnetic resonance imaging

List of Abbreviations (Cont.)

NK : Natural killers

NO : Nitric oxide

NSAID : Nonsteroidal antiinflammatory drug

PAF : Platelet activating factor

PaO_2 : Arterial oxygen tension

PCD : Percutaneous catheter drainage

PEEP : Positive end-expiratory pressure

PLA-2 : Phospholipase-A2

PMN : Neutrophil

PRSS1 : Serine protease 1 gene

PSTI : Pancreatic secretory trypsin inhibitor

PT : Prothrombin time

RRT : Renal replacement therapy

SaO_2 : Arterial oxygen saturation

SIRS : Systemic inflammatory response syndrome

SOFA : Sequential organ failure assessment

SPINK : Serine protease inhibitor Kazal gene

TAP : Trypsinogen activation peptide

TG : Triglyceride

TNF : Tumour necrosis factor

TPE : Therapeutic plasma exchange

List of Abbreviations (Cont.)

TPN	:	Total parenteral nutrition
USA	:	United States Of America
VLDL	:	Very low density lipoprotein
VZV	:	Varicella-zoster virus
WBC	:	White Blood Cell
WON	:	Walled-off necrosis

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INTRODUCTION

Acute pancreatitis is the most common gastrointestinal disease indication for acute hospitalization and its incidence continues to rise. In severe pancreatitis, morbidity and mortality remains high and is mainly driven by organ failure and infectious complications ***(Bruno et al., 2013).***

Recognizing patients with severe acute pancreatitis as soon as possible is critical for achieving optimal outcomes. Management depends largely on severity. Medical treatment of mild acute pancreatitis is relatively straight forward. Assessment of the patient's hemodynamic status should occur immediately upon presentation, with resuscitative measures initiated as necessary ***(Tenner et al., 2013).***

Because acute pancreatitis can usually be diagnosed based on clinical symptoms and laboratory testing, contrast-enhanced computed tomography (CT) scanning and/or magnetic resonance imaging (MRI) of the pancreas should be performed only in the absence of clinical improvement or a clear diagnosis ***(Ai et al., 2010).***

Patients with systemic inflammatory response syndrome (SIRS) and/or organ failure should, if possible, be admitted to an intensive care unit (ICU) or an intermediary care setting. All patients should receive aggressive hydration (***Haydock et al., 2013***).

The guidelines recommend against routinely using prophylactic antibiotics in cases of severe acute pancreatitis and/or sterile necrosis; however, intervention in patients with infected necrosis may be delayed through the use of antibiotics that penetrate the necrosis (***Baillie et al., 2013***).

Enteral nutrition should be used in severe cases to prevent infectious complications, and parenteral nutrition should be avoided. Surgical, radiologic, and/or endoscopic drainage in stable patients with infected necrosis should be postponed to permit a wall to develop around the necrosis (***Peery et al., 2012***).

AIM OF THE WORK

Golden aim of this work is generating updated good knowledge about the diagnosis and treatment of acute pancreatitis in the I.C.U.