

Risk factors associated with the development of hyperamylasemia and post-ERCP pancreatitis in the Cuban National Institute

Factores de riesgo con el desarrollo de la hiperamilasemia y pancreatitis post PCRE en el Cuban National Institute

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RESUMEN

Contexto: La pancreatitis aguda es la complicación más frecuente de la PCRE y algunos factores de riesgo son asociados con el desarrollo de hiperamilasemia y pancreatitis post PCRE. **Objetivos:** Identificar factores nuevos asociados con hiperamilasemia y pancreatitis post PCRE en pacientes que acudieron a nuestro centro. **Material y métodos:** Un estudio retrospectivo de cohorte se llevó a cabo en 170 pacientes en quienes se realizó una CPRE diagnóstico-terapéutica por enfermedad biliar-pancreática. 67 pacientes desarrollaron hiperamilasemia (39,4%) y 6 pancreatitis post PCRE (3,5%). Se aplicaron los siguientes criterios diagnósticos: Hiperamilasemia: elevación de la amilasa sérica por encima del valor normal (90IU). Pancreatitis aguda post PCRE: dolor abdominal continuo por más de 24 horas y elevación de la amilasa tres veces por encima del valor normal. **Resultados:** El número de canulaciones, más de 4 (19 pacientes), ($p=0,006$; RR= 3,00) se asoció significativamente con el desarrollo de la hiperamilasemia y la puesta de stents biliares (14 pacientes) se asoció como un factor protector ($p=0,00$; RR= 0,39). Los factores asociados con el desarrollo de la pancreatitis post PCRE se relacionaron con el paciente (localización peridiverticular de la papila ($p=0,00$; RR= 2,00) y disfunción del Esfínter de Oddi ($p=0,000$; RR=1,20). **Conclusiones:** Factores técnicos fueron asociados con el desarrollo de la hiperamilasemia, sin embargo, los relacionados con el desarrollo de la pancreatitis post PCRE fueron mayoritariamente relacionados al paciente.

Palabras clave: Pancreato-Colangiografía Retrógrada Endoscópica; hiperamilasemia; pancreatitis post PCRE (fuente: DeCS BIREME).

ABSTRACT

Context: Acute pancreatitis is the most common complication in ERCP, and some risk factors were associated with the development of hyperamylasemia and post-ERCP pancreatitis. **Objectives:** identifying new factors associated with the development of hyperamylasemia or post-ERCP pancreatitis in patients attended at our center. **Material and methods:** A (retrospective) cohort study was carried out in 170 patients on which a diagnostic-therapeutic ERCP was done due to biliary-pancreatic disease. 67 patients developed hyperamylasemia (39.4%) and 6 post-ERCP pancreatitis (3.5%). The following diagnostic criteria were applied: Hyperamylasemia: increase in the serum amylase level above the normal value (90I/U). Acute post-ERCP pancreatitis: clinical: continuous abdominal pain for over 24 hours and biochemical: elevation of amylase 3 times above normal value (90U/l). **Results:** The number of cannulations more than 4 (19 patients), ($p=0.006$; RR= 3.00) was associated significantly with the development of hyperamylasemia and the placing of biliary stent (14 patients), ($p=0.00$; RR= 0.39) was a protective factor. The factors associated with the development of post-ERCP pancreatitis were related with the patient (peridiverticular location of the papilla ($p=0.00$; RR= 2.00) and the sphincter of Oddi dysfunction ($p=0.000$; RR=1.20). **Conclusion:** Technical factors were associated with the development of hyperamylasemia, however, the factors associated with the development of post-ERCP pancreatitis in our universe of study were related mainly with the patient.

Key words: Endoscopic Retrograde Cholangiopancreatography; hyperamylasemia; post-ERCP pancreatitis (source: MeSH NLM).

INTRODUCTION

Endoscopic retrograde cholangiopancreatography (ERCP) reported for the first time in 1968 by McCune et al. had a fast acceptance as a direct and secure technique and has been converted into the therapeutic procedure of excellence in the biliopancreatic tract. Even though its technological advances, it remains as the technique with the highest morbimortality in digestive endoscopy⁽¹⁻³⁾.

Acute pancreatitis is the most common complication

in ERCP, with a reported incidence between 1.8 and 7.2% in some prospective series. However, the incidence report can vary largely up to 40%, depending on the criteria used for the diagnosis of pancreatitis as well as the type and duration of follow up of the patient. The generally accepted criteria for post-ERCP pancreatitis were presented in a consensus in 1991. These criteria include the presentation of a new pancreatic type abdominal pain, associated with at least an increase of serum amylase or lipase three times its value between the 24 hours after the ERCP⁽⁴⁻⁸⁾.

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