The way to a man’s heart is through his stomach.

Myocardial infarction in the setting of acute pancreatitis and the diagnostic challenge it poses.

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INTRODUCTION

Pancreatitis is known to cause multi-organ system failure. However, case reports of myocardial infarction (MI) as a complication of pancreatitis are rare and pose a significant diagnostic challenge.

CASE DESCRIPTION

• **HPI**: A 66-year-old Veteran with known history of pancreatitis and alcohol abuse presents to the Emergency Department with diffuse abdominal pain and nausea following a night of drinking.

• **Relevant Data**: Vital signs within normal limits. Elevated lipase level (772 U/L) and acute kidney injury (BUN 134 mg/dl; Creatinine 8.6 mg/dl). Normal ECG.

• **Slam-dunk diagnosis**: Acute pancreatitis → Treatment initiated with IV hydration and symptom management.

BUT...

• **New Data**: Repeat ECG done 6 hours after admission to check for QTc prolongation shows new anterior Q waves without ST elevation (Fig 1).

• **Further Development**: On day 3, patient is found to be in Afib with RVR after smoking an E-cigarette in hospital room (Fig2).

• **New Data**: ECG shows ST segment elevation of the anterior leads, persistent even after conversion to sinus rhythm (Fig 3). Elevated troponin level (0.46ng/ml). TTE: apical wall motion abnormalities and reduced ejection fraction (20-25%).

• **New diagnosis**: Acute pancreatitis complicated by STEMI→ Convalescing kidneys prohibit from emergent cardiac catheterization. Medical management initiated.

Final Development: Patient leaves AMA.

DISCUSSION

ECG changes in setting of acute pancreatitis are relatively common and include T-wave flattening, ST segment depression, or QT prolongation among others. However, reports of MI are rare in setting of acute pancreatitis, and interpretation of troponin values can be difficult.

As is frequently seen in the case of rare complications or unusual presentations, this case demonstrates the diagnostic pitfall of search satisficing, a type of premature closure which describes the tendency to end a decision-making process early once a reasonable solution presents itself. Hence, a better understanding of the link between acute pancreatitis and myocardial infarction is necessary to avoid misdiagnosis and prevent search satisficing.

REFERENCES