## Introduction:

Acute pericarditis (AP), accounts for 5 % of chest pain admissions with etiologies including idiopathic, infectious, neoplastic, metabolic, autoimmune and traumatic. In traumatic subset, penetrating trauma encompasses majority of AP cases and blunt trauma has been reported in rare instances. We present a case of acute post-traumatic pericarditis in a patient following blunt trauma sustained in a motor vehicle accident.

## **Case Presentation:**

A 37-year-old male presented following a motor vehicle accident. Patient was a restrained driver in a stopped truck and was rear ended by a tractor. His chest hit the steering wheel but he denied airbag deployment or loss of consciousness. His complaints included neck pain, chest wall tenderness reciprocal to seat belt area and right lower quadrant tenderness. Physical exam revealed reproducible chest wall and abdominal tenderness but no obvious bleeding or bruising. Detailed trauma workup including CT head, chest, abdomen and pelvis did not reveal any acute hemorrhages or fractures. EKG showed diffuse ST segment elevations and PR depression consistent with acute pericarditis (Figure). No murmurs or friction rub was appreciated on cardiac auscultation. Troponins and inflammatory markers were within normal limits. Transthoracic echocardiogram revealed ejection fraction of 62%, normal left and right ventricular size and function and small posterior pericardial effusion. Patient was not on blood thinners and treatment for acute pericarditis was initiated with Aspirin 650 mg TID and Colchicine 0.6 mg daily. Patient was observed for 2 days with some improvement of his pain. He was discharged on above mentioned regimen with plan for a close follow up in 2 weeks after repeating an echocardiogram.

## **Discussion:**

Trauma induced acute pericarditis can be masked by musculoskeletal injuries due to preceding trauma, thus making its timely diagnosis challenging. Although rare, blunt trauma should be considered as a possible inciting cause of AP. Detailed history and physical exam is vital and EKG helps differentiate AP from other causes of chest pain like ACS. Prompt echocardiography helps rule out effusions, especially in patients experiencing heart failure symptoms. Early recognition and management is essential to prevent risk of recurrence, progression to chronic fibrotic pericarditis or requirement of pericardiectomy.