Aortic Dissection in the Context of Alcoholic Cardiomyopathy

Dr Rachel Knight ¹, Dr Harriet Hurrell ², Dr Deepak Nama ²
Royal Blackburn Hospital – East Lancashire NHS Trust

Introduction
This is an individual case of Acute Aortic Dissection in the context of alcoholic cardiomyopathy - something previously unreported within medical case report literature.

Case Presentation
A 40 year old gentleman admitted with a collapse after drinking vodka with a background of alcoholic cardiomyopathy (Ejection Fraction 40% recovered from 10%) and complications of a Left Mural thrombus currently anti-coagulated. He complained of epigastric pain on admission and underwent a CT scan of the thorax, abdomen and pelvis with contrast to exclude ischaemic bowel which showed no focal abnormalities (Figure 1).

He was referred to medicine via the emergency department with possible de-compensation of his underlying heart failure and acute kidney injury secondary to his relapse into alcoholism. Shortly after arrival to the Acute Medicine Unit the patient had a cardiopulmonary arrests. He was taken to the intensive care department, intubated and ventilated. The ITU Speciality Trainee completed a trans-oesophageal ECHO which showed an aortic dissection. His second CT was completed almost 24 hours exactly after the first arrest and showed an extensive Type A dissection with significant extension into the right common carotid artery and minor extensions into the left common carotid and subclavian and a likely left renal infarct (Figure 2 & 3).

Discussion
Aortic Dissection has a well documented risk associated with hypertension and connective tissue disorders (Elhers Danlos & Marfans). The medical literature does not relate any current risk in underlying cardiomyopathy of any aetiology. This patient had developed a severe Heart Failure with an ejection fraction of 10% believed to be secondary to alcohol excess. On cessation of alcohol this gentlemans ejection fraction recovered to 40% with a clinical improvement. It is proposed that a relapse of his alcoholism and the associated improvement in his ejection fraction created the appropriate intimal fragility and pressure changes to cause Aortic Dissection.

References