



MESENTERIC ISCHEMIA IN PATIENT WITH TRAUMATIC DISSECTING AORTIC ANEURYSM

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Article Info	ABSTRACT
<p>Received 11/01/2016 Revised 20/01/2016 Accepted 28/01/2016</p> <p>Key words: Mesenteric ischemia, Trauma, Dissecting aneurysm, Mortality.</p>	<p>Traumatic aortic injury is one of the fatal cardiovascular diseases. This can lead to aortic dissection, rupture or decreased blood flow to various organs such as brain, heart, kidney and bowels. Mesenteric ischemia is one of the most serious complications of aortic dissection. Lack of significant signs in the early phases may be lead to delayed diagnosis. Therefore, early diagnosis and treatment before the ischemia is important to decrease in the mortality and morbidity.</p>

INTRODUCTION

Traumatic aortic injury complicated by intestinal ischemia is very difficult to manage and high mortality has been reported [1]. Ischemic necrosis due to visceral circulation is the most severe complication of acute aortic injury. Symptoms and signs of intestinal ischemia are often atypical or lacking. Optimal treatment is still not clearly established for the ischemic enterocolitis. Therefore, the early diagnosis and management is needed to reduce the mortalities.

CASE

A 65-year-old man with a past history of heavy smoking, hypertension and diabetes who was referred to our hospital for evaluation of severe abdominal pain. He had a history of abdominal trauma 2 months ago due to fall down. Physical examination demonstrated heart rate 110 beats/min, blood pressure 100/60 mm Hg, body temperature 36.7°C. Electrocardiogram showed left

ventricular hypertrophy (Fig. 1). Chest X-ray revealed tortuous aortic arch and dilated thoracic aorta (Fig. 2). Echocardiography showed huge fusiform aneurysmal dilatation (maximal diameter: 6.3 cm) with mural thrombus in the subcostal view. There was little color flow signal in the upper abdominal aorta (Fig.3). Chest abdominopelvic CT showed thoraco abdominal aortic dissection extending from just distal portion of left subclavian artery to the distal right common iliac aorta with compression of true lumen. There was marked thrombosis in the false lumen (Fig. 4). The patient's condition rapidly deteriorated with increasingly severe abdominal pain, abdominal distension and bloody diarrhea. The patient underwent emergency operation. However, He died from multi-organ failure caused by septic shock.

DISCUSSION AND COCLUSION

Traumatic abdominal aortic injury is rare but



often fatal. Aortic dissection is associated with major blunt intra-abdominal injury. The incidence of mesenteric ischemia caused by aortic dissection is uncommon and has been reported to 5% [2]. Patients with blunt abdominal aortic injuries sometimes showed a delayed presentation due to atypical or insignificant symptoms or signs. Therefore, once intestinal necrosis occurs, the mortality rate becomes very high. Contrast enhanced CT has been

became the standard tool of evaluating traumatic aortic injuries. It shows the presence of dissection flaps, intramural hematoma and active extravasation. The survival rate is still low despite advances in diagnosis and various treatments such as endovascular stent graft or surgical treatment. Early diagnosis and appropriate management before the ischemia is very important to increase the survival rate [3].

Fig 1. Electrocardiogram revealed left ventricular hypertrophy

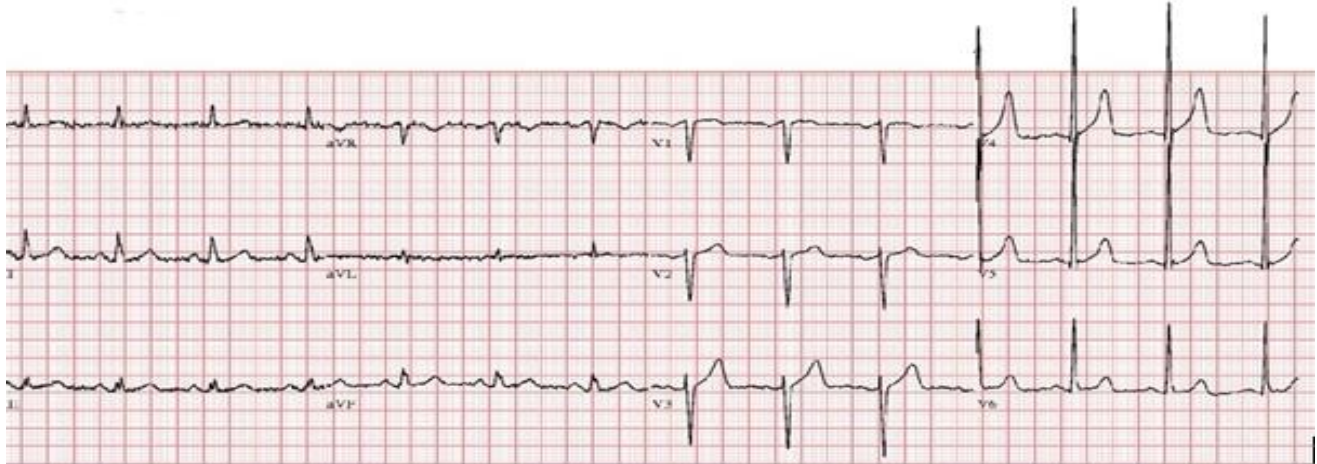


Fig 2. Chest X-ray demonstrated tortuous and dilated thoracic aorta



Fig 3. Echocardiography showed huge aneurysmal change with mural thrombus in the subcostal view

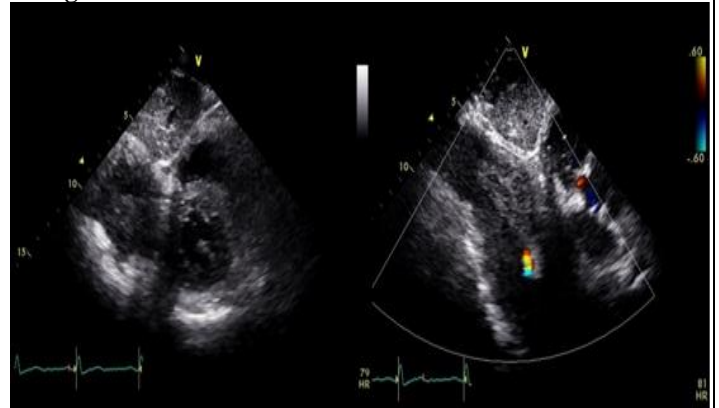


Fig 4. Chest-abdomino-pelvic CT showed thoraco abdominal aortic dissection extending from just distal portion of left subclavian artery to the distal right common iliac aorta with compression of true lumen



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CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

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