Title
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Journal
Critical Care Medicine, 44(12)

ISSN
0090-3493

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Publication Date
2016-12-01

DOI
10.1097/01.ccm.0000510314.06558.e3

Peer reviewed

vomiting, and headaches. Patient had a syncopal episode and became hypoxic requiring intubation. She was transferred to our medical ICU for tertiary care. Mechanical ventilation quickly escalated to maximal settings. She remained acidotic and hypoxic (ABG 6.8/57/70 on FiO2 100%). ECHO initially showed poor LV function with an EF of 10%. Veno-venous ECMO was initiated by the cardiac ICU. In addition to cardiogenic shock and respiratory failure, the patient had renal failure, urinary tract infection, and shock liver. Blood pressures greatly fluctuated on ECMO. She had dramatic systolic ranges from 70 to 220, requiring both vasopressors and antihypertensives, often within the same hour. She was placed on a nicardipine infusion, antibiotics, and stress dose steroids. Further inquiry with family unveiled a history of panic attacks, headaches, and palpitations for years, often leading to emergency room visits. Labs confirmed a high suspicion of pheochromocytoma with elevated plasma and urine normetanephrines and metanephrines. A CT scan of the abdomen showed a left adrenal mass. Phenoxybenzamine was started. She was decannulated from ECMO 72 hours later due to improved respiratory stability and cardiac function. Repeat ECHO showed an improved EF of 55%. An adrenalectomy was performed on hospital day 24 once hypertension and tachycardia was well controlled on the floor. Pathology confirmed pheochromocytoma. She was placed in the surgical ICU for blood pressure and glucose control after surgery. She was on carvedilol at discharge and insulin was discontinued. **Results:** ECMO proved to be a life-saving measure allowing time to uncover this patient's undiagnosed pathology. Management of catecholamine surges while on ECMO was a challenge, often requiring quick on-site decisions. Multiple critical care specialist were crucial for this patient to survive with no lifelong sequelae.

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ACUTE ABDOMINAL PAIN IN A TEENAGER WITH MARFAN SYNDROME: A KNOWN COMPLICATION IN A NEW LOCATION

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Learning Objectives: Marfan syndrome (MFS) is an autosomal dominant disorder affecting connective tissue with an incidence of 1 in 5000. A mutation in the FBN1 gene results in defective fibrillin production causing abnormal connective tissue. Aneurysm and dissection of the ascending aorta are the most clinically significant complications of MFS. Only 10% of dissections occur distal to the left subclavian artery. **Methods:** We report a case of a 15-year-old male with MFS who presented to the ED with sudden onset lower abdominal pain. His surgical history includes mitral valve repair and pectus excavatum repair. He had a known aortic root dilation of 35mm. During the initial assessment, the patient was alert, oriented and hemodynamically stable. An abdominal ultrasound revealed an aortic aneurysm. CT confirmed a 58mm by 73mm ruptured abdominal aortic aneurysm with organ and bowel displacement secondary to a large hematoma. During the CT scan he developed hypotension and altered mental status. He was intubated and fluid resuscitated. He underwent emergent repair of the aneurysm with a 14mm Dacron tube graft. Given his abdominal distention from the hematoma, he was unable to undergo primary closure until post-op day 7. He was discharged on post-op day 13. **Results:** There are currently no recommendations for evaluation and monitoring of the abdominal aorta in patients with MFS. The American Heart Association recommends an echo at the diagnosis of MFS and six months later to evaluate aortic root diameter. If the diameter remains stable, it is recommended to repeat an echo annually. Additionally, a CT or MRI should be performed at diagnosis and repeated every 3–5 years. To the best of our knowledge, this is the first reported case of a ruptured abdominal aortic aneurysm in a child with MFS. For patients with MFS and abdominal pain, it is paramount to have a high index of suspicion for abdominal aortic abnormalities. We believe this case provides the basis for a discussion regarding the need to develop screening protocols for abdominal aortic pathology once a patient with MFS develops aortic root dilation.

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DIRECT-CURRENT CARDIOVERSION IS A RARE CAUSE OF TAKOTSUBO CARDIOMYOPATHY

Kizhan Muhammad, Hussam Elkambergy, Muhammad Ali Javed

Learning Objectives: Takotsubo cardiomyopathy (TCM) was first described in Japan in 1991. Emotional and physical stress, especially in postmenopausal women, are precipitating factors with expected recovery in days to weeks. The proposed pathophysiology is catecholamine-induced cardiotoxicity and microvascular dysfunction. Diagnosis is established by characteristic echocardiography (ECHO) findings. **Methods:** A 73-year-old hemodynamically stable male patient presented in rapid atrial fibrillation (heart rate 156 beats-per-min). Past medical history included hypertension, diabetes mellitus, stage 3 chronic kidney disease and giant cell arteritis. ECHO demonstrated normal LV ejection fraction (LVEF) of 58% and moderately dilated left atrium. Rate control was achieved with diltiazem drip and then oral Sotalol. The patient was on intravenous Heparin. Direct current (DC) was delivered for cardioversion (CV) to sinus rhythm. Within 24 hours, the patient developed shock and acute pulmonary edema and was required transfer to Intensive care unit (ICU). This was followed by Pulseless electrical activity (PEA) arrest requiring intubation and mechanical ventilation. Urgent ECHO revealed severe mid-anterior, anteroseptal and apical hypokinesis. Basal segments contracted normally and LVEF was 30% - findings characteristic of TCM. He required norepinephrine for hemodynamic support (Milrinone not well tolerated). After a week of ICU support, ECHO revealed complete recovery of LVEF (60%). The patient was successfully weaned off Norepinephrine, extubated and discharged to rehab. **Results:** We present the first male patient with CV related TCM causing acute LV failure and cardiogenic shock (with classic ECHO findings). Coronary angiogram was not performed due to acute kidney injury. TCM after DC cardioversion is a rare but serious complication. The pathophysiology remains unknown. Possible hypotheses are transient cardiac dysfunction and idiosyncratic myocardial damage from DC shock. Prognosis is generally good with supportive treatment. Further research is required to explore the underlying mechanisms.

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MASSIVE FATAL IATROGENIC CEREBRAL AIR EMBOLISM DURING CORONARY ANGIOGRAPHY

Marin McCutcheon, Nader Kamangar

Learning Objectives: Iatrogenic arterial air embolism occurs when atmospheric gas is introduced into the systemic arterial system. The injection of air via radial artery catheter into the arterial circulation during routine use can rarely lead to cerebral air embolism and cerebrovascular accident. We report a case of massive ischemic stroke due to cerebral arterial air embolism during coronary angiography. The diagnosis was based on computed tomography (CT) findings of a patient with acute neurological deterioration during an otherwise uncomplicated coronary angiography via radial artery catheterization. **Methods:** A 72-year-old male was admitted with likely ischemic cardiomyopathy and post-infarction angina. Angiography was significant for multi-vessel coronary artery disease. At the termination of the procedure during placement of the radial artery compression device, the patient's right hand developed spastic movements and he became hypopneic. Minutes later his pupils dilated with a rightward fixed gaze deviation. CT showed multiple air emboli throughout the right hemisphere. He was transferred to the intensive care unit, placed in Trendelenberg, and started on 100% oxygen, to reduce air bubble size and enhance retrograde flow from the cerebral arteries, pending initiation of hyperbaric oxygen (HBO). He was treated with HBO for one day and hyperosmolar therapy for cerebral edema without improvement. Magnetic resonance imaging demonstrated a large right middle cerebral artery territory infarct extending into the right occipital lobe. After weeks without improvement in mental status and the development of multi-organ failure, he expired. **Results:** Cerebral air embolism via an arterial catheter is extremely rare. There are three published case reports of cerebral air embolism stemming from indwelling radial arterial lines and one report during cardiac catheterization. Despite its rarity, cerebral air embolism should be considered in patients with sudden neurological deterioration after central or venous manipulation, particularly when it temporally relates to injection or flushing of a catheter.

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CAUSES OF HEMATEMESIS: YOU DON'T KNOW THEM ALL

Sneh Pandey, Swati Pandey, Sofiya Rehman

Learning Objectives: Mega aorta syndrome (MAS) is defined as aneurysmal dilatation of all parts of aorta viz. ascending aorta, the aortic arch and the descending aorta. We describe an unusual presentation of MAS. **Methods:** A 73-year-old