Aortic dissection

Health & Medicine



Aortic Dissection Aortic dissection commonly refers to a type of tear in the inner walls of the aorta that allows blood to glide into the wall of the aorta. The passage of blood through the wall of the aorta causes a "false lumen". The unusual blood flow into the aortic wall can cause various problems in the human body. It can reduce the amount of blood in the body system. The dissection can also decrease blood flow to vital organs and may spread to other arteries thus blocking the circulation of blood in the true aorta (Juang, Braverman and Eagle 507). There are cases where the dissection causes rupture of the aortic wall due to weakening. Although, the conditions quite rare among people, its results can be fatal

Risk factors

If the aortic tear is not treated within the first 24 to 48 hours after it has occurred, it can be fatal. Several risk factors have been associated with aortic dissection including high blood pressure, a genetic disorder that affect the arteries, trauma, and cocaine abuse. According to Juang, Braverman and Eagle (507), the dissections usually occur to people in the age of 60s and majority of the cases occur in men. However, the condition may also occur in younger patients especially those experiencing genetic disorders associated with the aorta and other blood vessels. Aortic dissections can be classified either as of type A or as type B. Those occurring in the ascending aorta are type A while type B occur in the descending aorta. Treatment approaches for the condition also vary depending on the type of dissection Symptoms

Although symptoms of aortic dissection may vary, most patients experience severe pain in areas around the chest, back, and abdomen. Other persons complain of shortness of breath, arm and leg pains, weakness and loss of https://assignbuster.com/aortic-dissection/

consciousness. If arteries supplying the heart are affected, it may result in heart attack. If the arteries supplying blood to the brain are affected the patient may suffer a stroke (Juang, Braverman and Eagle 507).

Diagnosis

Diagnosis of aortic dissection includes a complete examination of blood pressure, heart, and pulses. An electrocardiogram (ECG) may be used to show complications of the dissection. X-rays may be used to show enlarged aorta. However, x-ray and ECG may fail to show aortic dissection. The most efficient and frequently used tests to diagnose aortic dissection include a computed tomography scan, transesophageal echocardiogram, and magnetic resonance imaging (MRI). Therefore, accurate diagnosis of the condition is critical for reducing the mortality rates of patients facing aortic dissection (Asouhidou and Asteri 5).

Treatment

The goals of treating a patient diagnosed with aortic dissection are to control the tear, find out whether the repairing the tear may benefit the patient and treating any other associated complications. The tear can be controlled by reducing the blood pressure as much as possible. Various medications are available to reduce blood pressure and lower heart rate. Such blockers include diltiazem and verapamil. Based on the evaluation of the patient, surgical treatment may be considered. Immediate surgery may be considered for a patient diagnosed with type A dissection. For type B dissection, medical treatment is usually considered and surgical treatment is not recommended (Hebballi and Swanevelder 16). Any complications due to the aortic dissection should be treated to ensure better patient outcomes Conclusion

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Since aortic dissection is a condition that may be fatal and life threatening, it should be immediately diagnosed and treated. Emergency surgery may be useful for type A dissections cases while medical treatment might be the best option for type B cases. However, before any treatment plan, through evaluations must be considered including a prior screening of first-degree relatives to determine underlying causes.

Work Cited

Asouhidou, Irene and Theodora. Asteri. " Acute aortic dissection: be Aware of misdiagnosis." BMC Research Notes 2. 25 (2009): 1-6.

Hebballi, Ravi and Justiaan. Swanevelder. "Diagnosis and Management of Aortic Dissection." Continuing Education in Anaesthesia, Critical Care & Pain 9. 1 (2009): 14-18. Print.

Juang, Derek, Alan Braverman and Kim. Eagle. " Aortic Dissection." Circulation 118 (2008): 507-510. print.