

Pseudo-allergic symptoms as a rare manifestation of an ascending aortic aneurysm

Objawy rzekomo alergiczne jako rzadka manifestacja tętniaka aorty wstępującej

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A 79-year-old man was admitted early in the morning to the emergency department (ED) due to oedema of the lips, tongue and dyspnoea. The symptoms awoke the patient from sleep in a supine position. On admission, heart rate was irregular about 80/min, blood pressure 150/80 mm Hg, respiratory rate 23/min, and temperature 36.8°C. Abnormal findings included visible, painless swelling of the lower part of the face, lips, mucous membranes of the mouth and throat, tongue and hoarseness. No itching was present. There were no obvious respiratory or cardiovascular abnormalities on physical examination. Medical history revealed ischaemic heart disease and myocardial infarct of the inferior wall 12 years ago and persistent atrial fibrillation. Aortic dilatation had been found on echocardiography ten years ago without follow up since that time. There was no history of exposure to chemicals or allergies but due to the swelling of the lips and tongue of unknown cause, the patient had twice attended the emergency department (in 2004 and 2005). The last episode of similar symptoms had occurred a year earlier during a long train trip and the symptoms subsided spontaneously. First line therapy at ED included oxygen mask and semi-supine position with some relief of symptoms. Chest X-ray (Fig. 1) detected the enlargement of the mediastinal shadow on the right side. Echocardiography revealed the extension of ascending aorta to the diameter of 56–57 mm at the height of 5 cm above the aortic valve (Figs. 2, 3). Acute superior vena cava syndrome (SVCS) was diagnosed based on the medical history and clinical picture, confirmed by echocardiography. The patient did not agree to further diagnostics and potential surgical intervention. Symptoms and signs of vena cava obstruction regressed within 4 hours of the observation. The patient left the ED in a stable general condition, without symptoms reported on admission. Currently, thrombosis caused by the presence of an intravascular device is the most common cause of nonmalignant SVCS. In most cases, thrombotic complications are revealed within 100 days from device introduction. The second major cause of SVCS is ascending aorta abnormality. The length of superior vena cava varies between 6 cm and 8 cm. It runs along the right edge of the sternum and then forms an arch whose concave margin is adjacent to the ascending aorta. The distension of aortic diameter is mainly due to degenerative changes of the aortic wall. The significantly dilated aorta (> 55 mm) may compress superior vena cava. In the case described above, swelling of the facial soft tissues was the main symptom and had to be differentiated from an allergic reaction which is present in 40% of patients admitted to ED with vasomotor response and urticaria. Demographic changes with increasing numbers of older patients will result in the more frequent occurrence of similar cases, and a differential diagnosis of obscure oedema located in the upper part of the body should involve the exclusion of an ascending aortic aneurysm as a possible cause.



Figure 1. A-P X-ray chest



Figure 2. Initial part of aorta



Figure 3. The largest distension of ascending aorta

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