Unexpected Screening Finding: Aortic Aneurysm in a 25-Year-Old Woman

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A 25-year-old healthy woman with a blood pressure of 125/85 mm Hg on both arms and a heart rate of 76 beats/min was admitted to the hospital for tumor staging because of a chronic cough, an elapsed left fossa clavicularis, and a suggestive radiogram (Fig 1). Thoracic computed tomography (CT) revealed an aortic aneurysm that occupied almost the entire left hemithorax. Figure 2 shows the aneurysm measuring $21 \times 12$ cm with an intraaortic volume of about 1.6 L. An ascending aorta with a caliber of 3.9 cm can be seen in Figure 3. The patient’s history revealed only an episode of chest pain 6 years previously during her pregnancy. Since then, she had experienced chronic pain in her shoulder. Four months previously she started to experience a chronic cough and was given antibiotics, without any improvement of the symptoms. Then an elapsed left fossa clavicularis was found.

We determined to perform a replacement of the descending aorta. With the possibility of a rupture in mind, we decided to approach through a sternotomy and a lateral thoracotomy at a 24°C body temperature. The descending aorta was replaced by 24-mm Vasutek prostheses from the aortic bow right after the left arteria carotis to the diaphragmatic passage, with reimplantation of the left subclavian artery and two groups of spinal arteries. The postoperative treatment was mainly influenced by extended respiratory therapy because of the longtime contusion of the lung. The histologic analyses of the resected aneurysm showed no specific pathologic tissue damage, and there was no familial clustering of aneurysm or tissue disease. In retrospective, we could find only the episode of chest pain 6 years before diagnosis during the patient’s pregnancy with its hormonal changes as a possible cause.