

LETTER

Successful conservative treatment of type A acute aortic dissection in a 91-year-old multimorbid female patient

Dear Editor,

Acute type A aortic dissection (ATAAD) is a surgical emergency with an incidence of 2-3.5 cases per 100,000 person-years and an early, within the first 30 days, mortality rate of >70 % if untreated and 17-20 % postoperatively¹. Surgical treatment is the gold standard in ATAAD. The main preoperative prognostication factors are hypertension, age >75 years, prior vascular disease, and diabetes mellitus. The most frequent perioperative fatal entities are heart failure, stroke, hemorrhage, and multi-organ failure. Though frailty and advanced age increase 30-day and 1-year mortality, the International Registry of Acute Dissection (IRAD) proved equal postoperative mortality rates among septuagenarians and octogenarians, suggesting that older age should be carefully interpreted and highlighting the predominance of the anatomical characteristics of dissection in the decision-making process². In a different IRAD study, hypertension upon arrival, normal thoracic x-ray, and dissection not affecting the aortic root were linked to a better prognosis with definitive medical treatment³, as was the case with our patient.

A 91-year-old female patient arrived at our emergency department due to acute severe thoracic pain. Her medical history consisted of hemorrhagic stroke, myocardial infarction, diabetes mellitus, hypertension, dyslipidemia, and peripheral vascular disease. Clinical examination revealed systemic blood pressure: 188/109 mmHg, heart rate: 107 to 118 beats-per-minute, oxygen saturation: 95 %, and unaltered chronic right-sided hemiparesis. Echocardiography indicated preserved biventricular function and enlarged ascending aorta. The whole-aorta contrast-enhanced computed tomography (CT) affirmed ATAAD, extending from the sinotubular junction to the diaphragmatic level of the aorta without affecting the aortic root.

Conservative treatment, consisting of amlodipine 5 mg, bisoprolol 10 mg, glyceryl trinitrate 5 mg, morphine 2 mg upon request, and fondaparinux 2.5 mg, was applied. Throughout hospitalization, she maintained a systemic blood pressure of approximately 120/75 mmHg, normal oxygen saturation, heart rate and body temperature and no evidence of malperfusion. On the 15th day, follow-up whole-aorta contrast-enhanced CT revealed thrombus formation between tunicae intima and media without further dissection propagation. The patient was discharged on the 16th day with a recommendation for better compliance to her prior medication, respiratory physiotherapy, and kinesiotherapy. The follow-up protocol consisted of an echocardiographic assessment at 1st and 3rd month and a thoracic-aorta contrast-enhanced CT scan at 3rd month post-discharge. In conclusion, in such perplexed patients, a carefully tailored conservative treatment with strict systemic blood pressure control can secure an acceptable quality of life and reduce surgical mortality.

Keywords: Aorta, type A aortic dissection, elderly, conservative treatment

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Conflict of interest

The authors declare no conflicts of interest. Consent of patient's legal representative is secured.

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