Acute Retrograde Type A Intramural Hematoma during SARS-CoV-2 time

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PII: S0741-5214(20)32147-9

DOI: https://doi.org/10.1016/j.jvs.2020.09.019

Reference: YMVA 11595

To appear in: *Journal of Vascular Surgery*

Received Date: 12 July 2020

Accepted Date: 11 September 2020

Please cite this article as: Katsarou M, Grassi V, Lomazzi C, Domanin M, Trimarchi S, Acute Retrograde Type A Intramural Hematoma during SARS-CoV-2 time, *Journal of Vascular Surgery* (2020), doi: https://doi.org/10.1016/j.jvs.2020.09.019.

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Text:

Acute intramural hematomas (IMH) occur in about 6% of patients with acute dissections (AD), mostly affecting the descending aorta.[1] Type A IMHs involve, type B IMHs do not involve the ascending aorta. Retrograde type A IMH (retro-TAIMH) origins in the descending aorta and extend into the arch or ascending aorta. TAIMHs with distal AD carry an in-hospital mortality risk of 12-26%.[1-2]

We report the case of an 85-year-old woman with acute retro-TAIMH and distal AD. The patient's consent for publication was obtained. She was admitted to the emergency room with acute onset dyspnea, chest pain but no evidence of malperfusion. Emergency Computed Tomography Angiography (CTA) identified a retro-TAIMH with AD with proximal entry tear above the celiac axis (A/Cover).

The patient was hemodynamically stable. She was treated with hypotensive and analgesic therapy and hospitalized for intensive monitoring. Follow-up CTA was performed at 24 hours (B) and 7 days (C) showing progressive to complete thrombosis of the entry tear, with reduction in aortic diameter which is the most important predictor of IMH regression and positive outcome.[3] Complete symptom regression occurred. The event was observed during the SARS-CoV-2 pandemic peak in Lombardy and the patient was found to be positive to the virus five days after symptom onset, with progressive dyspnea and worsening findings on chest X rays (D). She died due to pulmonary complications at 19 days.

Hybrid treatment with ascending aortic replacement and distal thoracic aortic endovascular repair (TEVAR), or with Frozen Elephant Trunk is the most appropriate treatment for acute retro-TAIMH. TEVAR is a valid alternative only in patients with prohibitive surgical risk, although landing zones may be unsuitable and the risk of neurological and cardiac complications

may be high.[4] Medical treatment appears to be appropriate in asymptomatic patients, in those with non-complicated retro-TAIMH and in patients with high open surgical / TEVAR risks.[4] Considering both the absence of end-organ malperfusion and the advanced age of the patient, we chose medical treatment, that allows to reduce mortality by 67-95%.[5] This choice was proven effective with symptom recovery and clinical stability, until the deadly overlap of the SARS-CoV-2.

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