

Rare case of Giant Coronary artery aneurysm with diagnostic dilemma. Case Report.

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Introduction

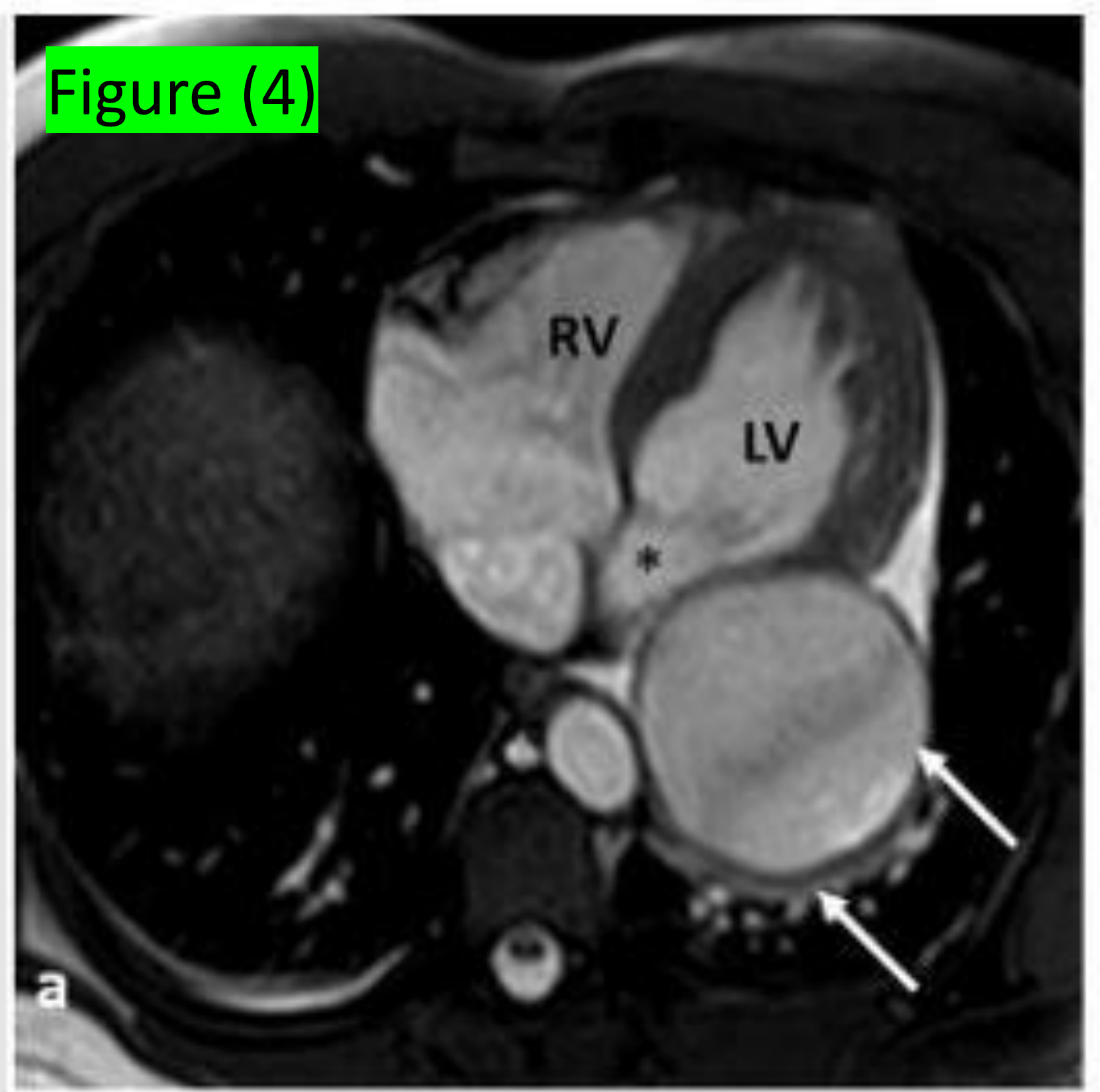
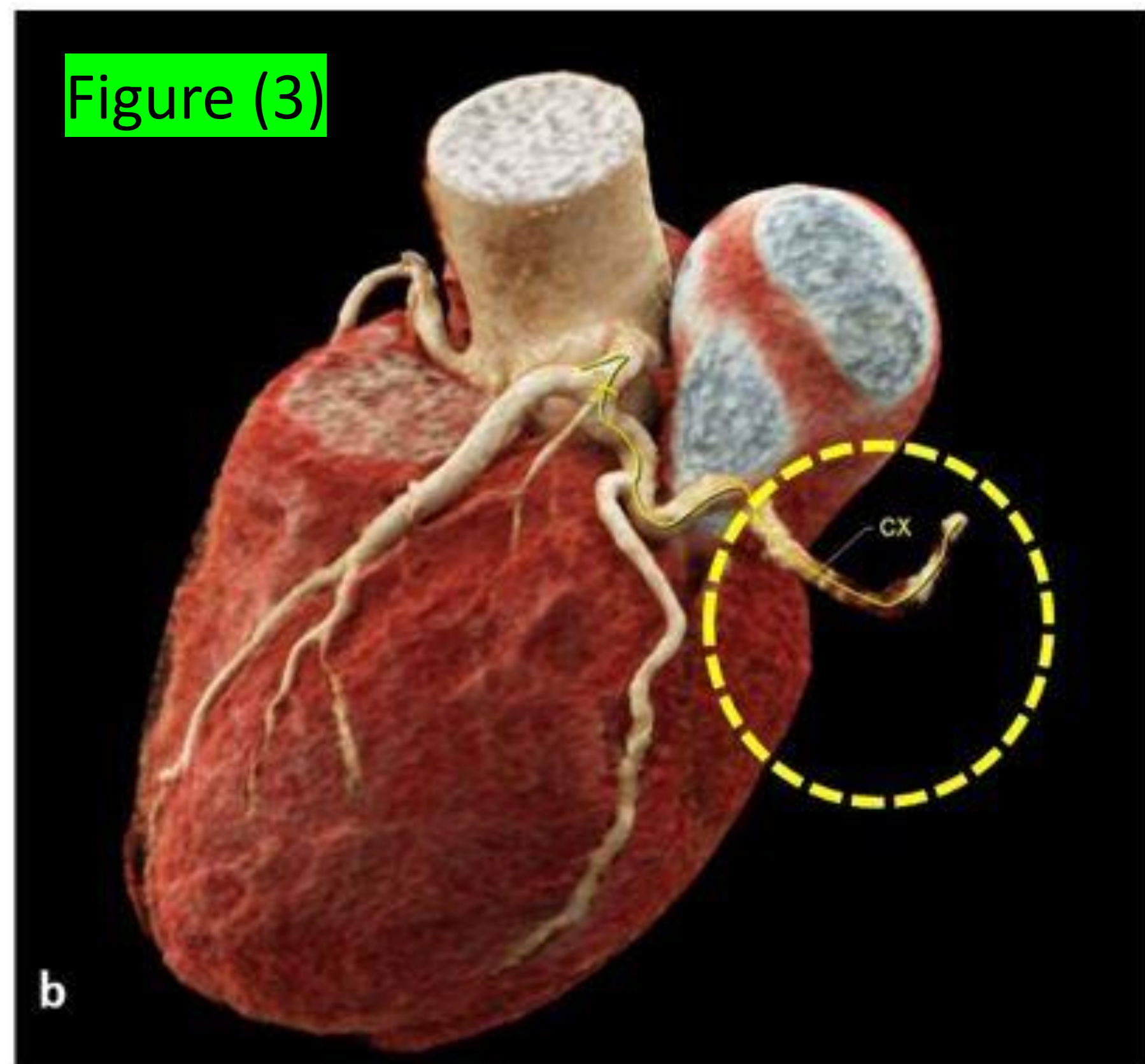
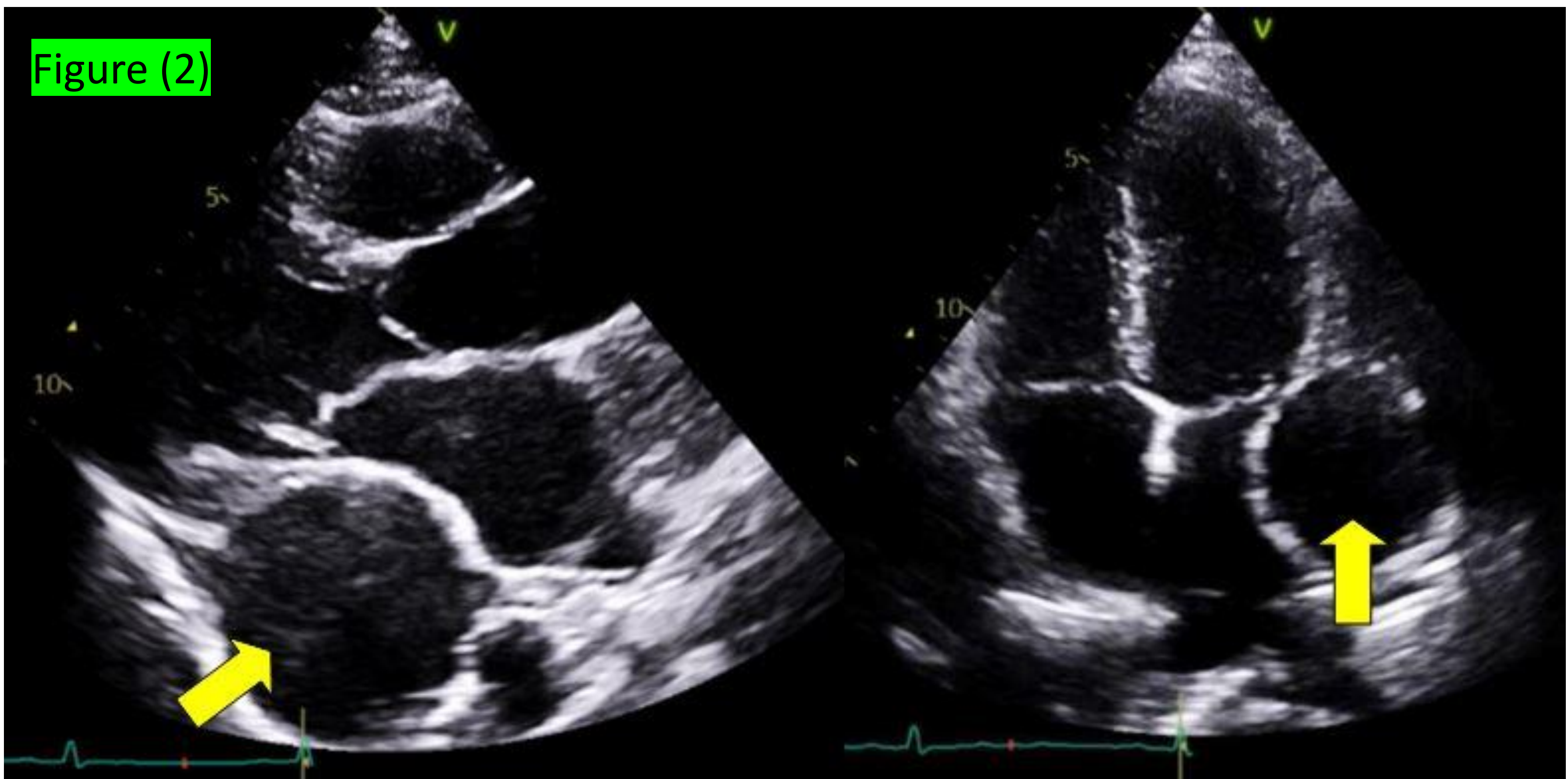
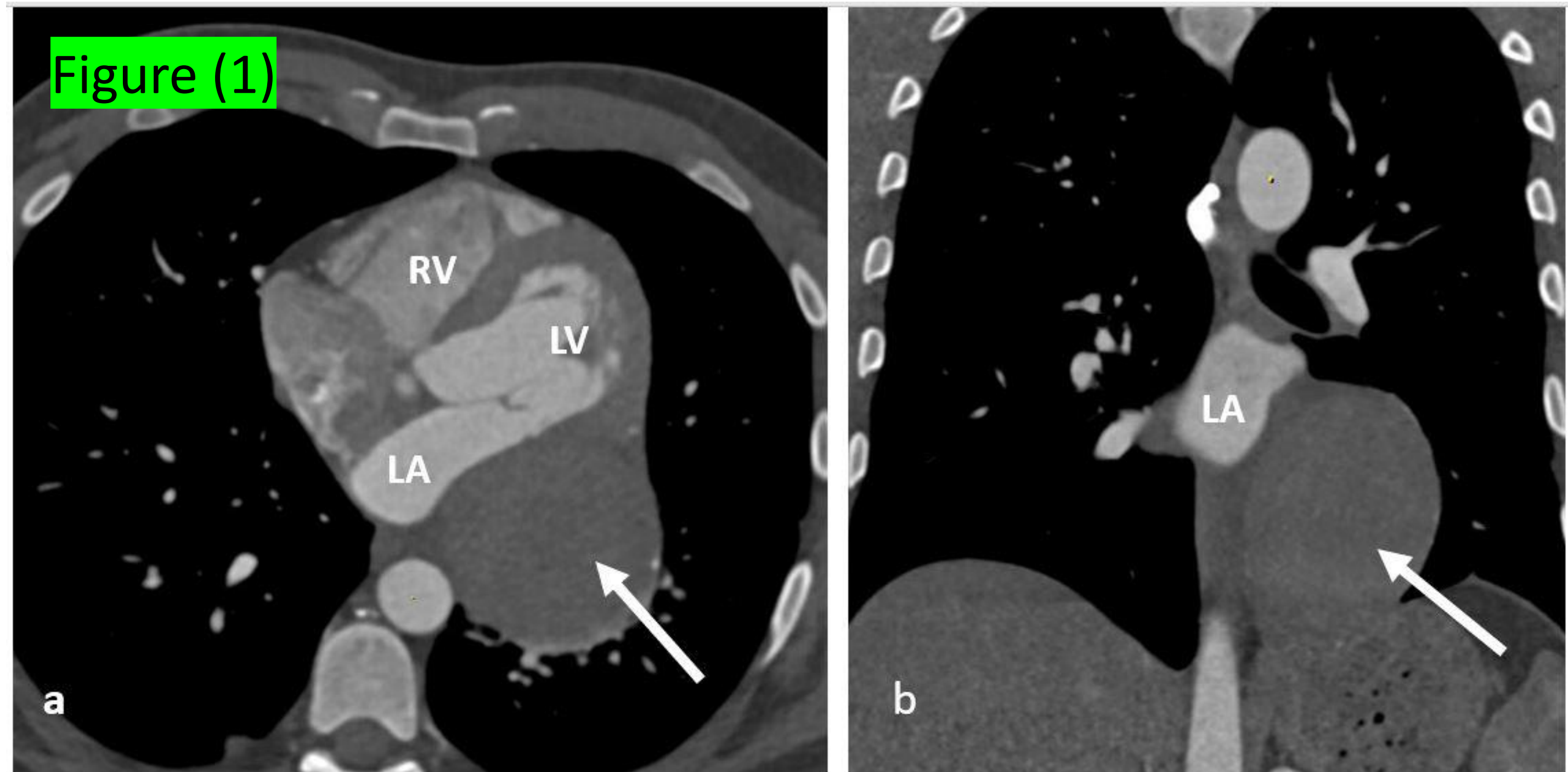
Coronary artery aneurysm is uncommon, usually caused by atherosclerosis in adults and Kawasaki disease in children. Cases linked to drug-eluting stents are increasing. The condition involves arterial wall damage and dilation. The case report discusses a large aneurysm in a patient with no significant medical history.

Case

A 31-year-old male with no significant medical history presented symptoms indicative of acute coronary syndrome, including severe chest pain, shortness of breath, nausea, and diaphoresis. Initial evaluations, such as an electrocardiogram (ECG) and troponin levels, showed ST-segment elevation and elevated troponin levels, respectively.

Diagnostic

To rule out aortic issues, a CT aortic angiogram (Figure 1) was conducted, incidentally revealing a sizable rounded structure indenting the posterolateral wall of the left atrium, measuring 5.4 x 6.2 x 6.6 cm. Subsequent imaging, including transthoracic echocardiography (Figure 2), unveiled a large mass behind the base of the left atrium and ventricle, measuring 5.5 x 5.6 cm, compressing both. Additional modalities, like CT coronary angiogram (Figure 3) and cardiac MRI (Figure 4), confirmed the diagnosis of a large distal left circumflex artery aneurysm with an intramural thrombus and recent myocardial infarction.

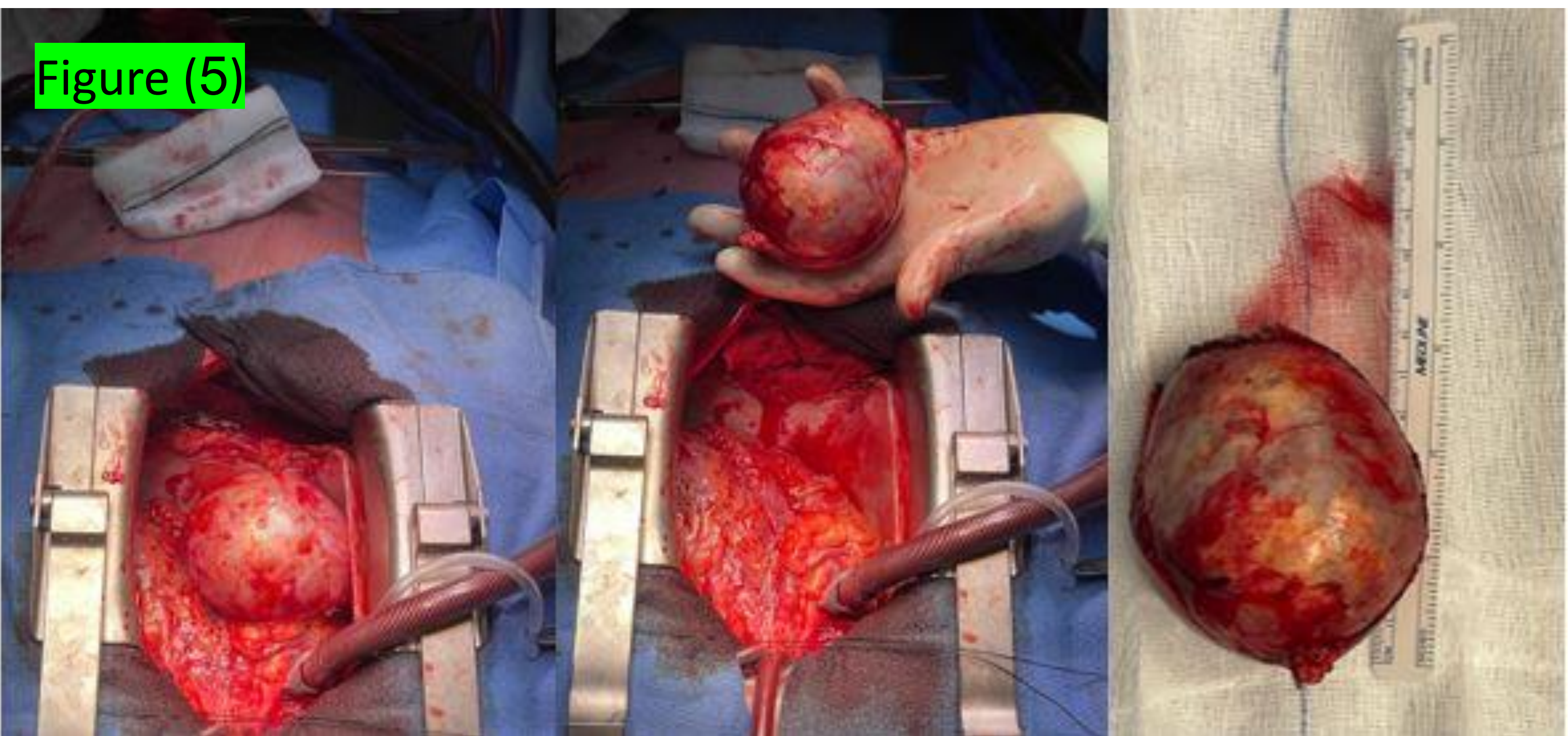


Surgical Correction

Surgical excision of the mass, closely associated with the artery, was performed successfully on beating heart under cardiopulmonary support (Figure 5), intraoperative transoesophageal echocardiogram showing trivial to mild mitral regurgitation.

Post op and Follow up

The patient recovered smoothly postoperatively and was discharged on aspirin, clopidogrel, and lisinopril. Histopathological examination of the excised mass revealed features consistent with a coronary artery aneurysm. Follow-up visits showed no recurrent symptoms.



CONCLUSION

Coronary artery aneurysm (CAA) is a focal dilation of coronary segments, often exceeding 1.5 times the adjacent normal segment. Giant CAAs are diagnosed when the diameter is over 20 mm (1,2) . They're found in up to 5% of patients undergoing coronary angiography and are associated with poor long-term outcomes. Clinical presentations range from incidental findings to acute coronary syndrome. Multimodal imaging aids diagnosis, and surgical excision confirms the diagnosis.

REFERENCES

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