

## Non anthracycline cardio-toxicity in a patient with mediastinal sarcoma

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**OBJECTIVES:** We report a case of non anthracycline cardiomyopathy in a patient previously treated with Doxorubicine.

33 years old lady was consulted by cardiolooncologist before treatment planning for mediastinal tumor compressing the right branch of main pulmonary artery (PA). Tumor proved to be synovial sarcoma at left lobectomy (Fig 1, Fig 2).

Fig. 1. Chest PET CT of the patient.

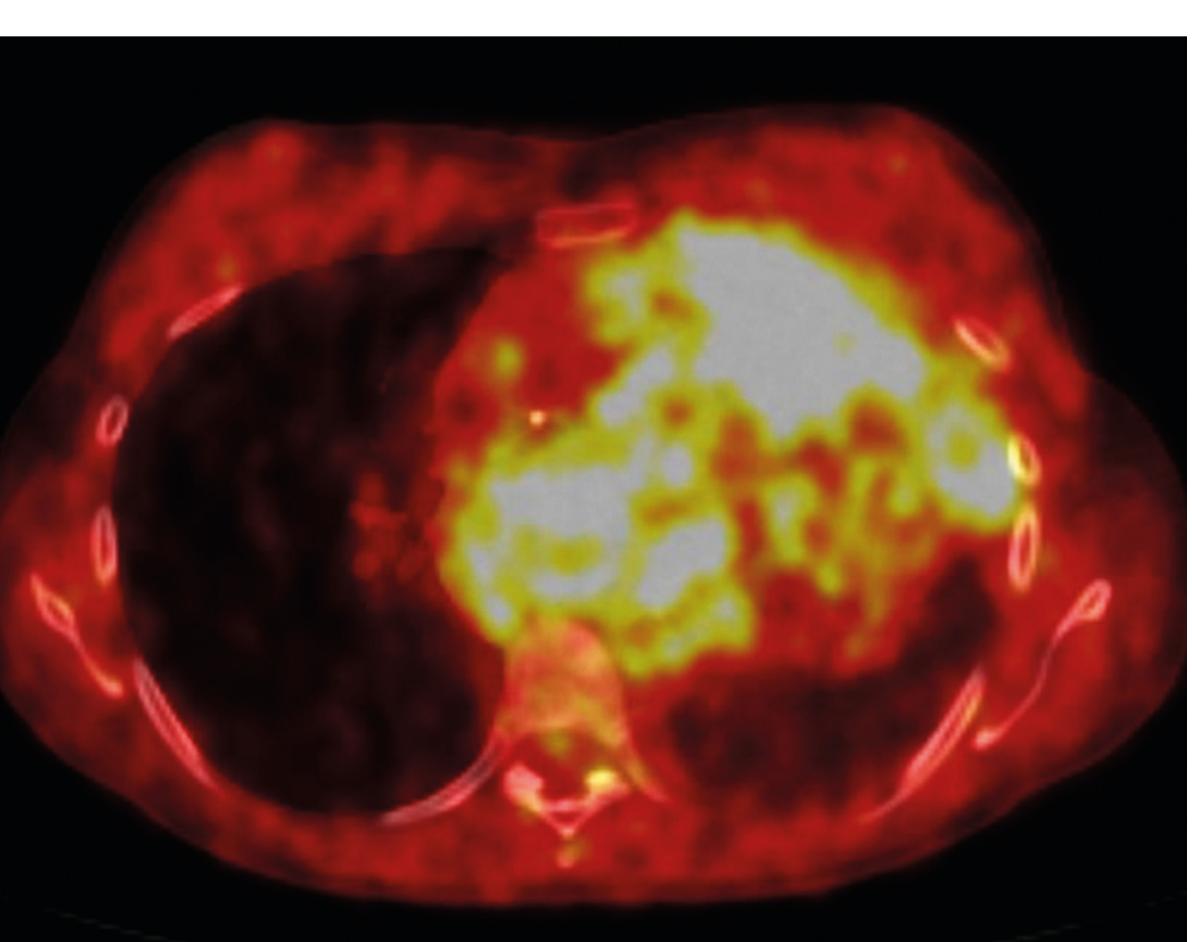
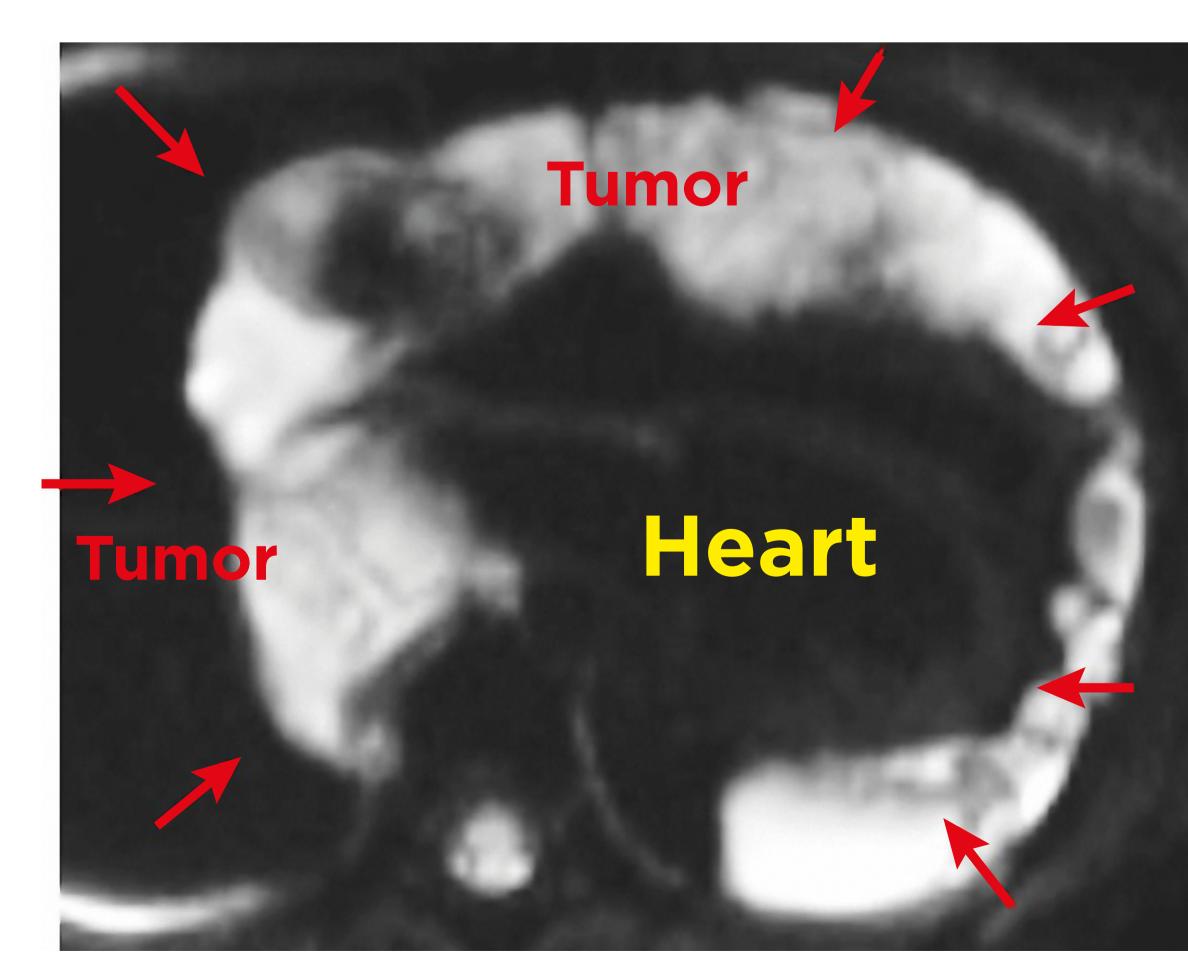


Fig. 2. Chest MRI of the patient.



MEDICAL HISTORY: Synovial sarcoma of the middle third of the diaphysis of the left tibia in 2006. Amputation of distal third of left thigh (2006). From 2006 till 2017 6 courses of anthracycline chemotherapy in combination with non anthracyclines. All the anthracycline infusions accompanied by cardioprotection with Doxrazoxane. Generalization of the process in August 2016: metastases in the left lung. Extended lower left lobectomy with resection of the segments and the pericardium in March 2017.

DIAGNOSTIC STUDIES IN OCTOBER 2018: Echocardiography (EchoCG) revealed right ventricular and atrial dilatation, PA transstenotic gradient of 70 mmHg, with left ventricular ejection fraction (LV EF) of 0,46. Patient was in a stage III heart failure with ankle edema ascites and left hemothorax.

Surgical treatment and percutaneous balloon angioplasty for PA stenosis was not considered because of the high risk and unpredictable efficacy (Fig 3.).

TREATMENT: After left thoracocentesis treatment was started with Pazopanib 800 mg once a day and Spironolactone 100 mg once a day for 3 weeks. Alleviation of peripheral edema and symptomatic improvement was achieved. Control EchoCG in December 18, 2018: the PA gradient reduced to 30 mmHg, right heart overload had never persisted, however LV EF dropped to 25% with dilatation of LV and left pericardial effusion (Fig.4).

Cardiooncology team decided to continue treatment with half dose of Pazopanib. Enalapril and Bisoprolol was started in minimal doses followed by up-titration.

Fig. 3. CT scan of the patient with obstruction of the right PA.

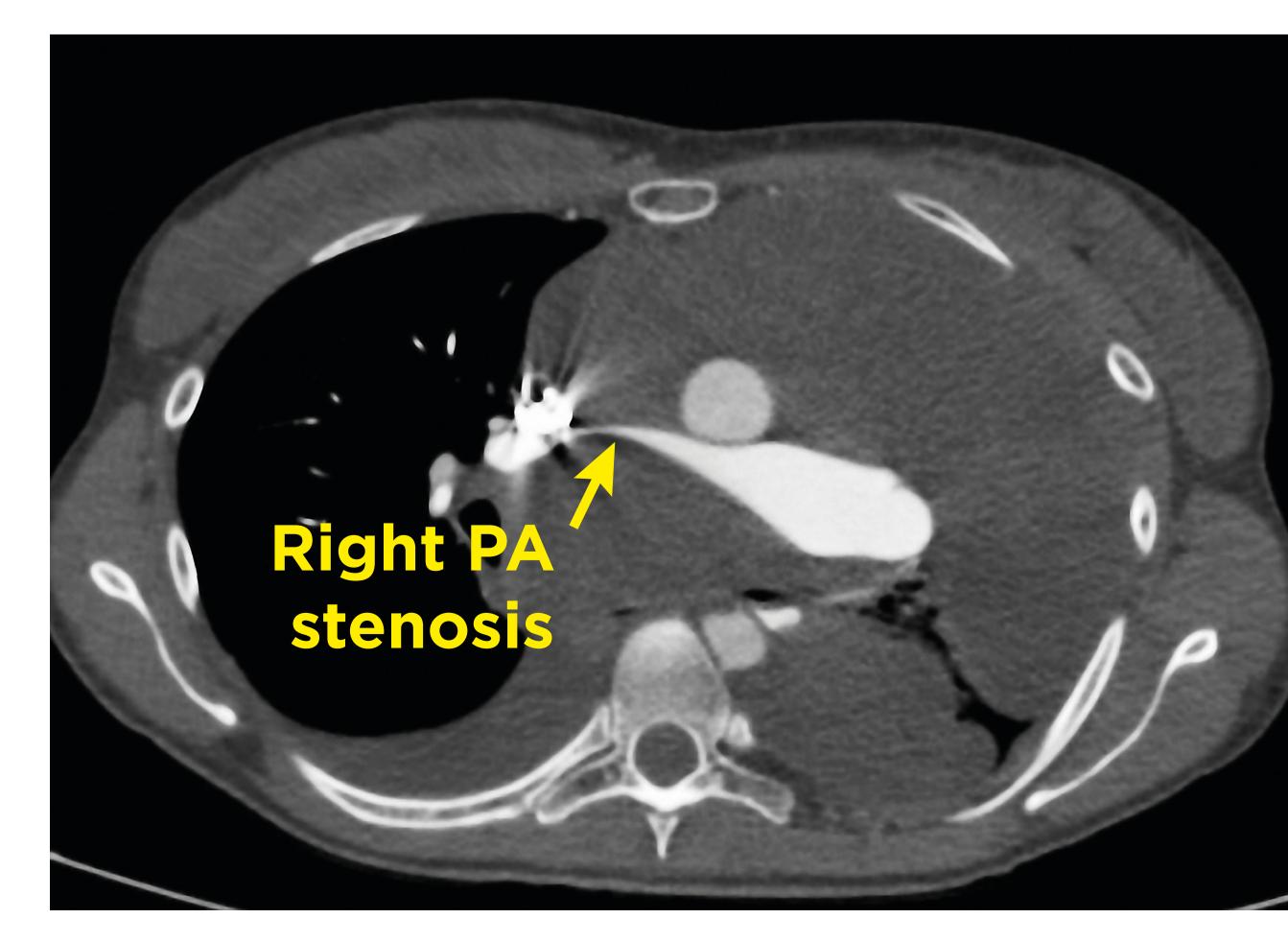
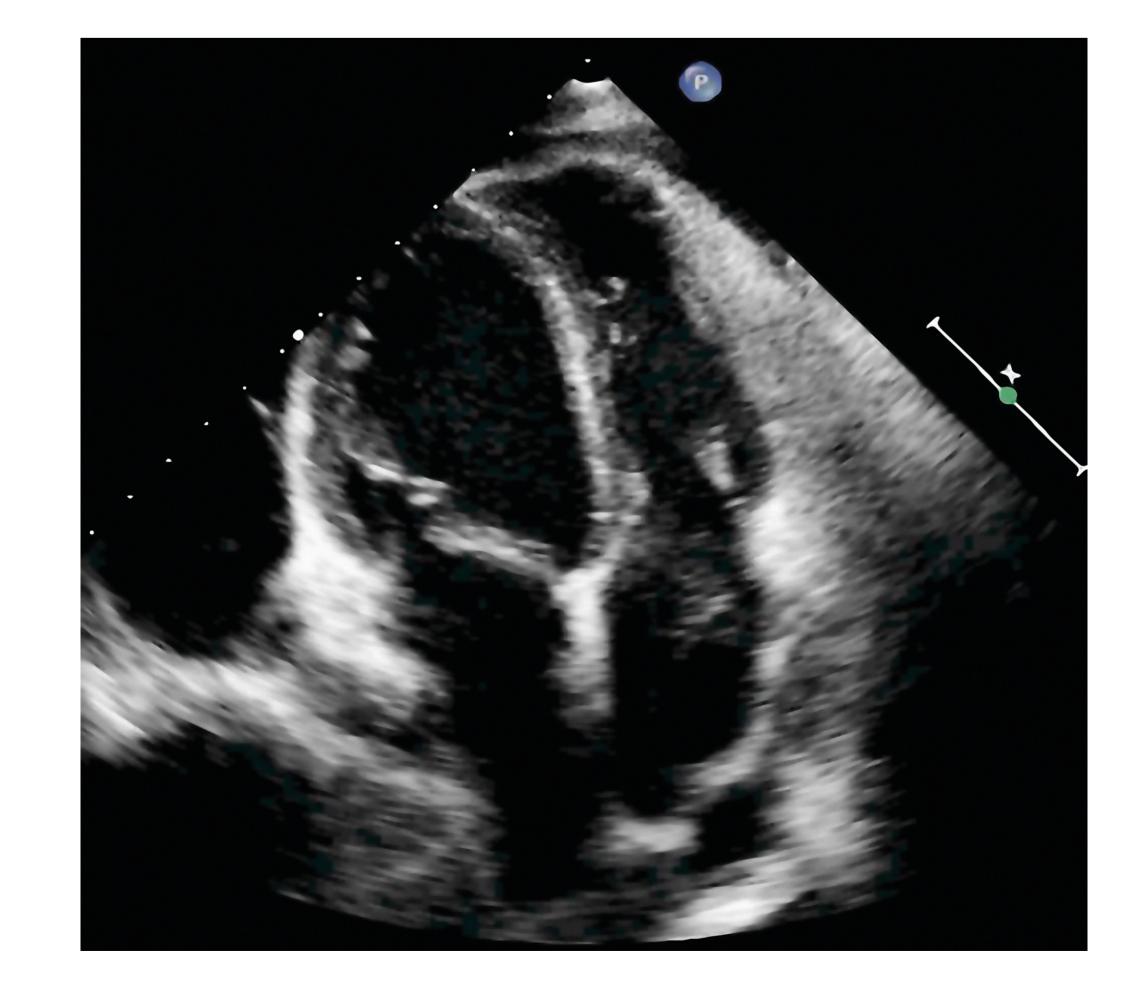
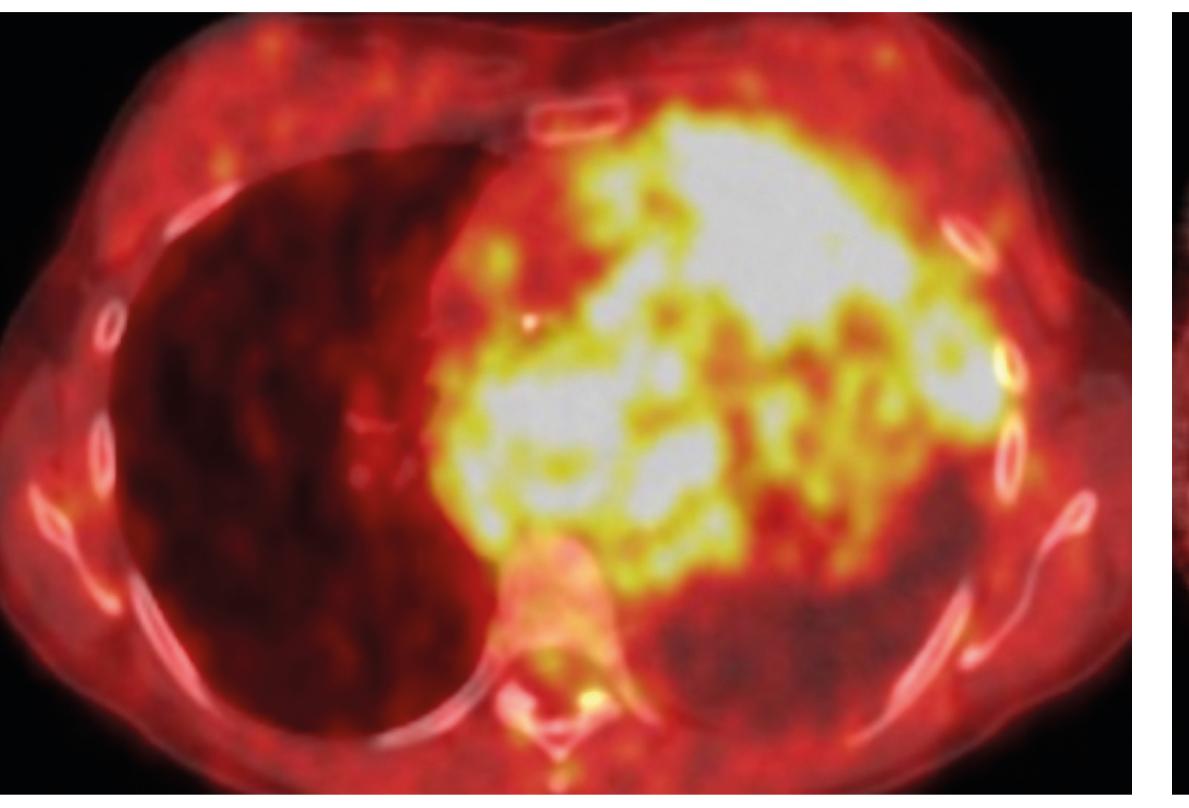


Fig. 4. LV dilatation and large left sided pleural effusion.



COURSE OF DISEASE: PET CT at the end of January 2019 revealed reduction of mediastinal tumor (Fig.5). LV EF by EchoCG improved up to 0,35. Pazopanib daily dose was increased up to 800 mg withouht significant adverse effects, patient was stable for 10 months. She died after 11 months due to cerebral hemorrhage and brain metastases.

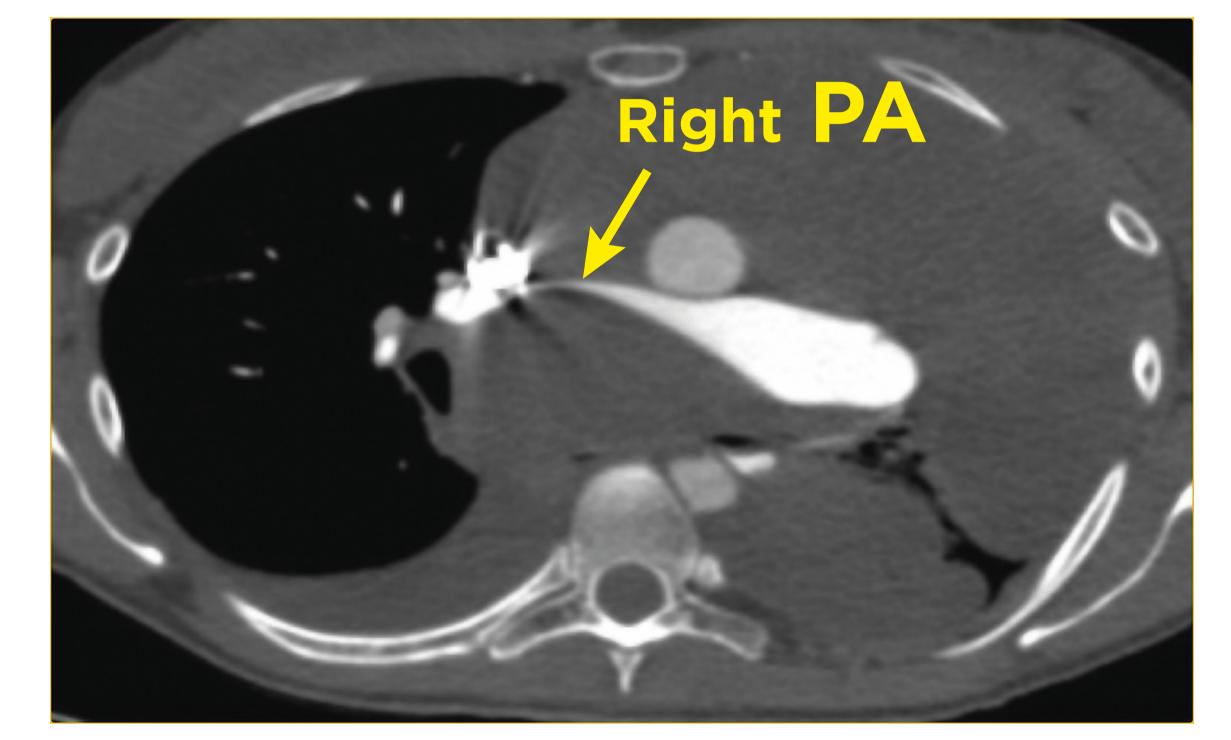
Fig. 5. PET CT showing reduction of mediastinal sarcoma.

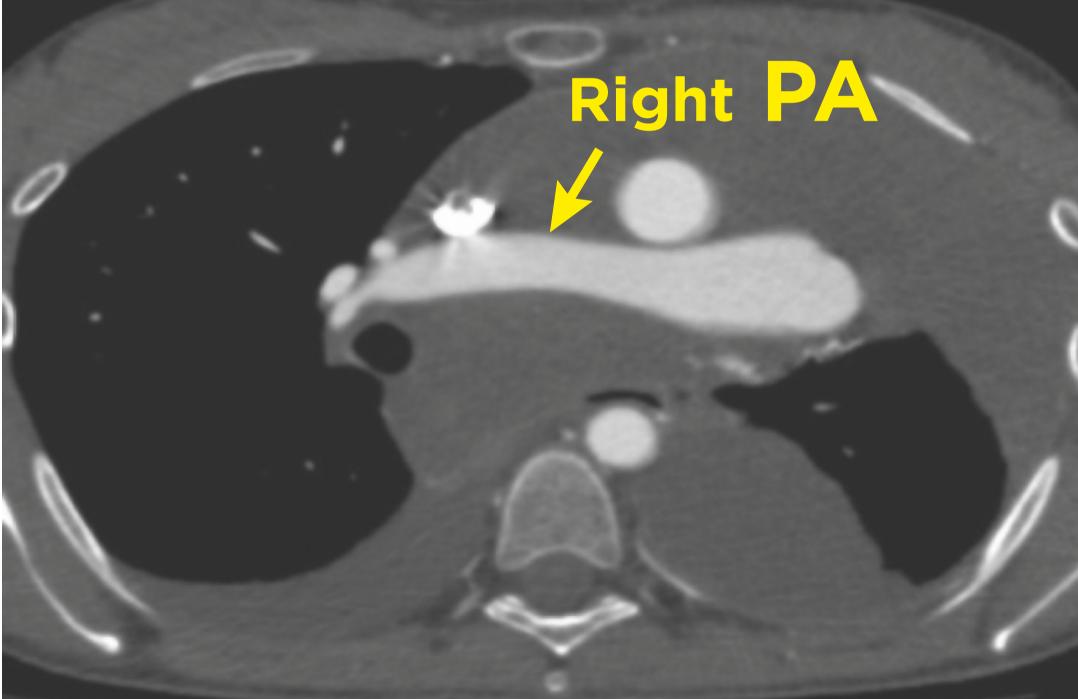


Initial

8 months later on Pazopanib

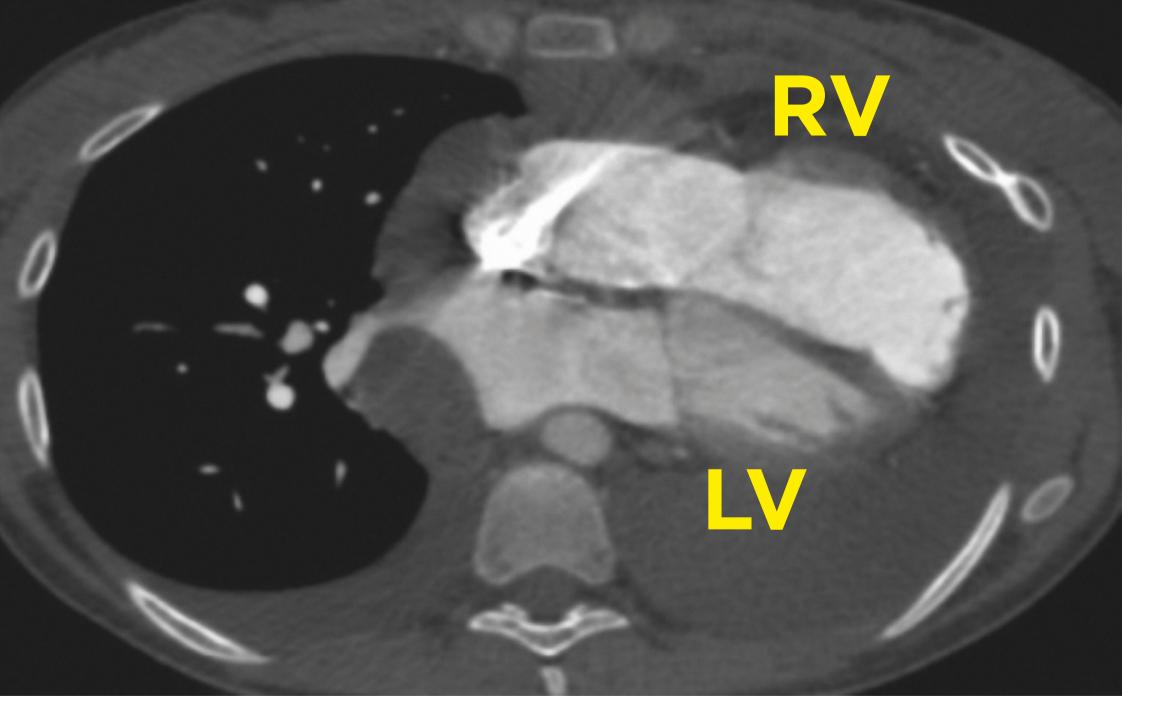
Fig. 6. CT scans of the right pulmonary artery (PA) and heart chambers – Right and Left ventricles (RV, LV). Alleviation of right PA stenosis and reduction of RV strain on Pazopanib treatment.

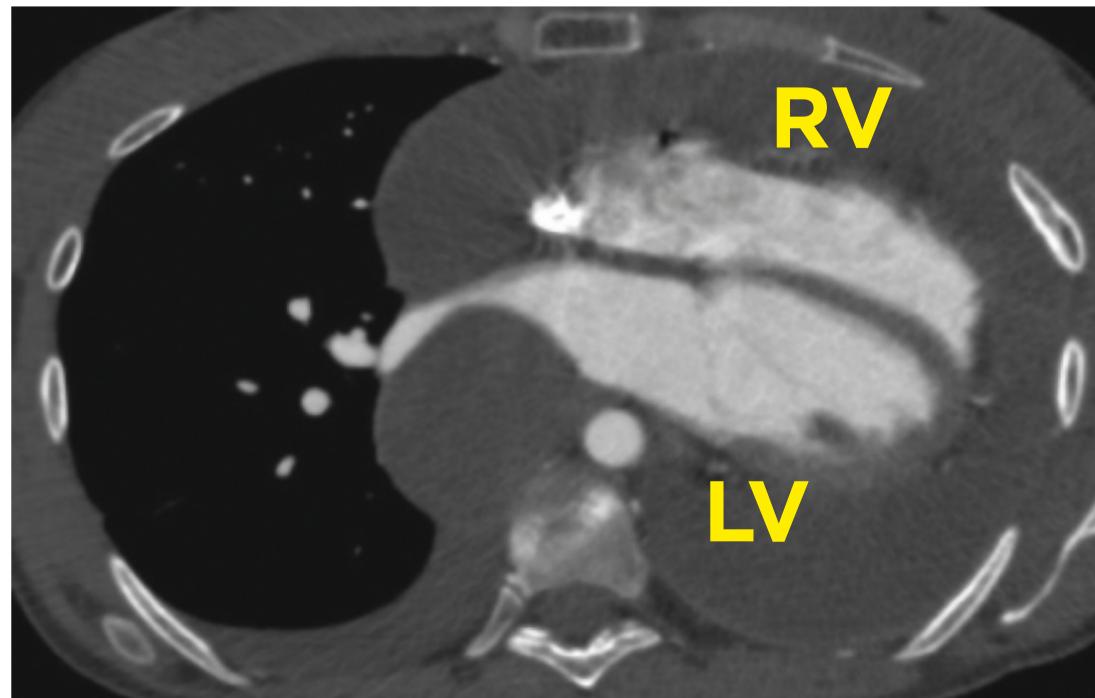




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8 months later





**SUMMARY:** This is the story of successful treatment of sinovial sarcoma and Pazopanib cardio-toxicity in a patient with previous anthracycline therapy.

Disclosure:
The authors
D.P. Dundua,
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A.G. Kedrova
have nothing to
disclose.