






Egyptian Society of
CARDIOLOGY



 45TH Annual International Congress of the
EGYPTIAN SOCIETY OF CARDIOLOGY
CardioEgypt 2018

Cardiac chloroma

Presented by:
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Clinical presentation

- A 70-years-old male patient.
- Ex-smoker.
- No past medical history.
- A surgical history of unilateral nephrectomy on top of Renal cell carcinoma since 7 years, but the patient didn't receive any chemotherapy or radiotherapy postoperatively.

Clinical presentation

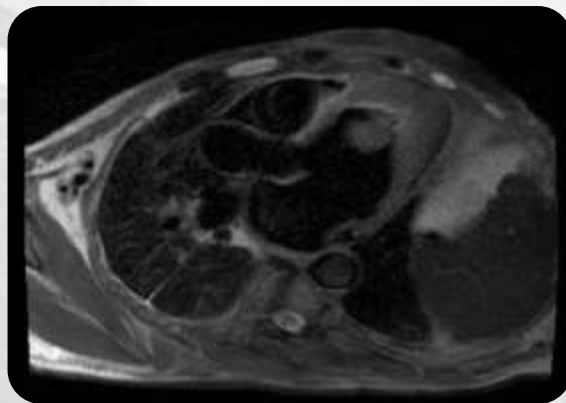
- One month before presentation, the patient started to complain of easy fatigability and weight loss.
- He sought medical advice with an internist who referred him to a hematologist after discovering a pancytopenia in his blood picture afterwards he was diagnosed as *acute myeloid leukemia*.
- A routine prechemotherapy echocardiography was ordered.



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Cardiac MRI



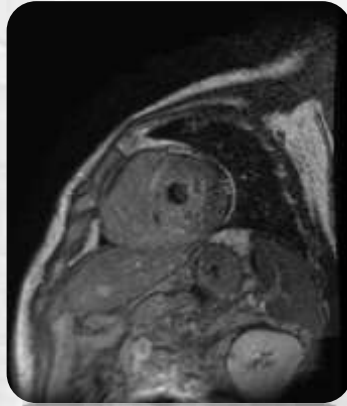
T2 with fat suppression



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Cardiac MRI



Late GAD



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Diagnosis

- So, the patient was diagnosed to have a very rare form of extra-medullary myeloid leukemia or what is called *myeloid sarcoma (MS) or cardiac chloroma*.
- Due to patient frailty, the team decided to proceed for palliative chemotherapy and follow up by echocardiography and CMR.
- Unfortunately, during chemotherapy sessions the patient developed massive Intra-cranial hemorrhage (ICH) and died shortly after.



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Take home message

- MS or chloroma is a rare extramedullary tumor that may complicate AML, It can occur concurrently with, prior to, or even after the onset of marrow disease.
- These tumors are formed of immature myeloid cells that most commonly affect bone, skin, orbit, spine, lymph nodes and gastrointestinal tract.
- Although microscopic leukemic cell infiltrates are commonly present in the heart, intracardiac tumor masses are rare and have been found in < 1% of patients with AML in larger autopsy series.



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Take home message

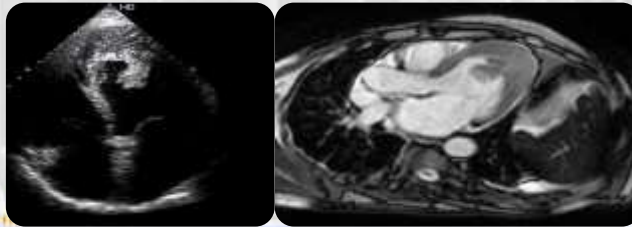
- The median age of diagnosis is 35 years (7–72 years) with a marked male predisposition and right atrial predominance.
- The gold standard for diagnosis is based on *histopathological analysis* of endomyocardial biopsies.
- Prompt treatment with standard AML protocols should be initiated.
- Role of radiotherapy is still unclear and better reserved to special cases such as urgent symptomatic relief, palliation or residual mass despite chemotherapy.
- Presence of MS is usually associated with poor prognosis.



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Take home message

- TTE has been and remains the main tool for diagnosis and follow up of all cardiac masses.
- Recent advances in cardiac imaging including MSCT, CMR and PET scan can help in further characterization of cardiac masses as well as detection of any complications.



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Acknowledgment:

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