

# The Telltale Fat Necrosis

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## LEARNING OBJECTIVES

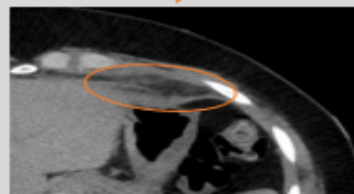
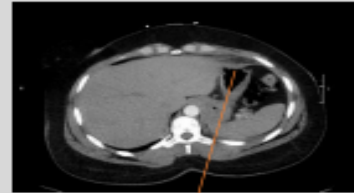
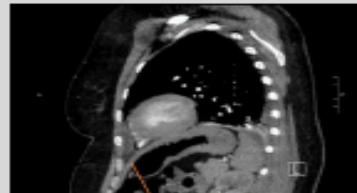
- Learn about epipericardial fat necrosis
- Be able to consider it in the differential of chest pain

## CASE BACKGROUND

37 year old female with distant history of idiopathic pericarditis presents with acute onset pleuritic, nonreproducible chest pain. It is associated with dyspnea on exertion

- Notable labs
  - Troponin negative x2
  - ESR 81 mm/hr (0-30mm/hr)
  - CRP 12.6mg/L (<7.48mg/L)
- ECG sinus rhythm without abnormalities
- CT chest with IV contrast negative for pulmonary embolism but noted infiltration of the epipericardial fat pad concerning for necrosis
- TTE normal with no pericardial effusion

## IMAGING FINDINGS



## DISCUSSION

Epipericardial fat necrosis was first described in 1957 after which <100 cases have been reported. We do not have reliable epidemiologic data or known associated conditions<sup>1</sup>

Mild inflammatory markers are occasionally noted

CT chest has been the preferred diagnostic imaging although it can occasionally be seen on Xray as a peri-cardiac mass<sup>2</sup>

On CT chest, it can look similar to a lipomatous mass<sup>2</sup>

## POST HOSPITAL COURSE

Patient was discharged with a two week course of ibuprofen.  
Her pain gradually improved and resolved after 10 days

## CONCLUSION

Epipericardial fat necrosis is a consideration for the differential of acute chest pain

Because of its rarity and seemingly benign nature, this diagnosis should not preclude appropriate work-up for chest pain

No guidelines exist, but it is reasonable to repeat imaging to ensure resolution<sup>2</sup>

Awareness of this disease entity may reduce anxiety, empiric therapies, and advanced work-up

## REFERENCES

1. Giassi et al. Epipericardial Fat Necrosis: An Underdiagnosed Condition. *British Journal of Radiology*. 2014;87:20140118. DOI: 10.1259/bjr.20140118
2. Pineda et al. Epipericardial Fat Necrosis: Radiologic Diagnosis and Follow-up. *American Journal of Roentgenology*. 2005;185:1234-1236 DOI: 10.2214/AJR.04.1310