**Dressler’s Syndrome: A Rare Complication**

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**CardioCase presentation**

**Greg’s Chest Pain**

Greg, 46, arrives at the ED at the end of the day with his wife, who was very concerned about his increasing chest pain that has been present for the last three days.

**History**

He had a fairly extensive infarction two months ago and was treated with angioplasty with stent.

Greg used to smoke 40 to 50 cigarettes a day before he had the infarction and unfortunately has been unable to completely give this habit up.

He has a strong family history of coronary artery disease as both his father and elderly brother had MIs in their early forties. For that reason, the local cardiologist discharged him on warfarin for three months and Greg has asked his physician to monitor his international normalized ratio (INR) and dosing.

The pain was gradual in onset and was initially retrosternal, but became pleuritic in nature afterwards. It is worse when lying down, associated with:

- increased shortness of breath,
- malaise and
- fever of 37.5°C to 38°C.

His current daily medications include:

- ramipril 5 mg,
- bisoprolol 5 mg,
- warfarin 8 mg,
- clopidogrel 75 mg,
- acetylsalicylic acid 81 mg and
- atorvastatin 80 mg.

**Examination**

Greg is very anxious, with a radial pulse of 100 bpm that is regular and bilaterally equal. His BP is 110/80 mmHg and his chest is clear, though he is somewhat restricted when taking a deep breath.

He has a normal double rhythm with a scratchy, grating, high-pitched friction rub at the left lower sternal border.

Though his chest wall is not tender, he has minimal epigastric tenderness. The rest of his examination is normal.

His physician admitted him to hospital for further investigations.

For more on Greg, see page 21.
Dressler’s syndrome is also known as post-MI syndrome and can occur from two to five days, or as long as three months post-MI. Other virtually identical syndromes may follow open-heart surgery (postpericardiotomy or postcardiotomy syndromes), or penetrating or blunt trauma.

The incidence of Dressler’s syndrome is about 4% following transmural infarction and probably higher in open heart surgery.

The mechanism responsible for this syndrome has not been identified, but there is a likelihood that Dressler’s syndrome is the result of a hypersensitivity reaction in which antigen originates from injured myocardial tissue and/or pericardium.

**Presentation**

The presentation of Dressler’s syndrome can be as follows:
- Pain, often pleuritic and worse lying down
- Malaise
- Fever
- Dyspnea
- Rarely, it may cause cardiac tamponade or acute pneumonitis

**Investigations**

The following investigations may be useful when diagnosing Dressler’s syndrome:
- Leucocytosis, sometimes with eosinophilia, raised erythrocyte sedimentation rate (ESR)
- Serology may show heart autoantibodies
- Chest x-ray may reveal:
  - pleural effusion (83%),
  - parenchymal opacities (74%),
  - enlarged cardiac silhouette from pericardial effusion (40%)
- ECG may show ST elevation in most leads without reciprocal ST depression
- Echocardiogram shows pericardial effusion

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**About the author...**

Dr. Kubba graduated from the University of Baghdad where he initially trained as a Trauma Surgeon. He moved to Britain, where he received his FRCS and worked as an ER Physician before specializing in Family Medicine. He is currently a FP, Missisauga, Ontario.
Management

There is no specific therapy, but bed rest and, if necessary, anti-inflammatory treatment with acetylsalicylic acid up to 900 mg q.i.d., may be given. If this is ineffective, one of the non-steroidal anti-inflammatory agents, such as indomethacin (25 mg to 75 mg q.i.d.) or glucocorticoid (e.g., 20 mg to 80 mg q.d. of prednisone) effectively suppresses the clinical manifestations of the acute illness.

Resources