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THE CONCEPT AND MISCONCEPTIONS OF DRESSLER SYNDROME

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Myocardial Infarction (MI) - is one of the most dangerous pathologies in cardiology which can cause complications like heart failure. Usually when a patient presents with severe MI, revascularization therapy is performed which can include Percutaneous Coronary Intervention (PCI-angioplasty with stent), CABG (coronary artery bypass graft) and thrombolytics like alteplase, streptokinase, etc. After a successful operation we usually discharge the patient with dual anti-platelet medication, statins and anti-hypertensive medication. In some cases around 2-10 weeks post-operation the patients can develop fever, chest pain, dyspnea. These symptoms can be easily misdiagnosed to resemble pneumonia or re-infarction. When this happens it is very easy to confuse the symptoms with MI or pneumonia but this is actually the presentation of Dressler's syndrome (DS).

How does DS present? DS is a manifestation in where the body sends an excessive immune response to try to correct the damaged heart tissue from MI. The accumulation of antibodies and inflammatory cells can cause inflammation around the necrotic heart tissue especially the pericardial sac. Certain iatrogenic events can trigger DS for example: heart surgery, PCI, Pacemaker Implantation, Cardiac Ablation etc.

Patient Presentation of DS. Patients with DS will complain of chest pain usually when lying down and relief when sitting forward. This is due to the stretching of the pericardium causing the patient to feel pain which doesn't relieve with nitroglycerin treatment. This is very characteristic of pericardial inflammation and this presentation can help lead the doctor to the correct diagnosis as this form of chest pain is not associated usually with MI or other valvular heart diseases. On auscultation a pericardial rub can be heard also. The patient will also present with a low grade fever upon entering the clinic and if you collect the case history (anamnesis morbi) of such a patient you will usually see that they have performed heart surgery or had MI in the recent past usually 2-10 weeks.

Diagnosis of DS: When a patient complains of chest pain doctors usually will order an Electrocardiogram (ECG) to help us understand if the pain is of a cardiac origin. Upon looking at the ECG you will see ST elevation in multiple leads but the shape will be concave up ST segment elevation similar to a horse saddle and is very different to the ST segment elevation we see in MI. We can check also general blood test and there will be abnormal levels in, Erythrocyte sedimentation rate, and White blood cell (markers of active autoimmune inflammation), also C-reactive protein will be increased. Echocardiogram presents pericardial thickening, fluid, and sometimes calcification.

Management of DS: Is based on using medicines reducing inflammation level and pain. Patient administration includes medication like Aspirin and Ibuprofen, or another Non Steroidal Anti Inflammatory Drugs. And most patients with DS has been shown to have positive effect with this medication. In severe or refractory cases of DS we use Colchicine and oral or IV Glucocorticoids. However, we must take into account these class of medications may give unpleasant side effects.