ACCELERATED CORONARY ATHEROSCLEROSIS – A MAJOR CAUSE OF MYOCARDIAL INFARCTION IN SYSTEMIC LUPUS ERYTHEMATOSUS


Division of Rheumatology, Dept. of Medicine Solna, Karolinska Institutet, Karolinska University Hospital, Stockholm; Dept. of Clinical Sciences, Division of Cardiovascular Medicine, Danderyd Hospital, Karolinska Institutet, Stockholm, Sweden

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Background Patients with Systemic Lupus Erythematosus (SLE) are at increased risk of premature mortality due to myocardial infarction (MI). The underlying mechanisms are not fully understood. This study aims to generate new hypotheses on these mechanisms through description of MI subtypes and locations and by identifying risk factors for MI.

Methods We identified 35 SLE patients with and a first-time non-procedural MI (MI-SLE). We matched these 35 MI-SLE patients to 35 patients with MI but not SLE (MI-nonSLE) and 35 patients with SLE but not MI (nonMI-SLE) for gender, age and geographical location. Patients and controls were matched individually (1:1:1). Detailed retrospective medical file review was performed.

Results Median age was 62 years and 89% were female in all groups. Prevalence of ST-elevation MI was similar in MI-SLE patients and MI-nonSLE patients (27% vs 36%; p=0.80). The left ventricle was the most commonly infarcted in both MI-SLE and MI-nonSLE – 77% vs 59% according to coronary angiography and 42% vs 55% according to echocardiography. The left ventricular ejection fraction was similar in MI-SLE and MI-nonSLE patients (p=0.62). MI with coronary atherosclerosis was trends wise more common in MI-SLE patients compared to MI-nonSLE patients (88% vs 66%; p=0.065).

Previous cardiovascular disease (43%, 5.7%, 14%; p<0.001), coronary artery disease (31%, 2.9%, 2.9%; p<0.001) and low plasma albumin levels (35 g/L, 40 g/L, not determined; p=0.001) distinguished MI-SLE patients from MI-nonSLE and nonMI-SLE patients.

Conclusion Coronary atherosclerosis was present in a large majority of MI-SLE patients at the event of MI. In addition, coronary artery disease preceding MI was more prevalent in SLE patients than in the general population, indicating accelerated coronary atherosclerosis as a cause of increased MI prevalence in SLE. Among SLE patients, low albumin levels were a risk factor for MI.
Background Lupus Mastitis is rare and can be easily confused with infection or breast cancer.

Methods We report two cases of lupus mastitis, in different clinical settings.

Results The first patient was a 34-year-old female with Systemic Lupus Erythematosus (SLE) with renal, hematological, musculoskeletal and cutaneous involvement, medicated with hydroxychloroquine (HCQ) 400 mg/day, mycophenolate mofetil 2000 mg/day and prednisolone 7.5 mg/day. She presented to the emergency department with painful right breast. On examination, the breast was swollen, warm and painful to palpation. Breast ultrasound revealed a vascularized and lobulated mass at the upper external quadrant, with liquid areas inside, suggesting possible abscess, which was drained and biopsied.

Histopathological analysis demonstrated a fibroinflammatory process, with fibrotic and abscedated areas, ductitis, lobulitis and vasculitis, compatible with lupus mastitis.

Cultures from the aspirated fluid were negative. The patient was medicated with antibiotic, NSAIDs and prednisolone dose was increased to 10 mg/day with significant improvement.

The second case refers to a 48-year-old female patient, with SLE with cutaneous, immunological and musculoskeletal involvement, who had withdrawn HCQ due to ocular toxicity. In the following months, the patient presented recurrent episodes of mastitis, on the same location. Breast ultrasound performed during one of the episodes revealed a hyperecogenic area of the fibroglandular tissue, with cystic areas. In spite of repeated treatment with antibiotics and NSAIDs, mastitis recurred, in a total of seven times. Because of worsening of the cutaneous lupus, the patient was medicated with methotrexate up to 15 mg/week. No more episodes of mastitis were recorded and biopsy of the breast, which had been considered, was not performed due to total recovery. The gynecology and rheumatology teams concluded that lupus was the etiology of the recurrent mastitis.

Conclusions Clinicians should be aware of this entity to avoid unnecessary invasive procedures, which may increase inflammation involved in lupus mastitis. Therapeutic approach usually demands increasing immunomodulation.