Case Presentation

VALVULAR AFFECTION IN SYSTEMIC RHEUMATOLOGIC DISORDERS

By

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Personal history

- A 42 years old female patient.
- From Assiut, housewife.
- Married from 25 years old and has one Child one year old.
- Right handed.
- No special habits.
Complaint

- Weakness of both left upper and lower limbs of 3 days duration.
**History of present illness**

- The condition started 6 days before admission.

- The patient was admitted in general surgery unit for elective laparoscopic cholecystectomy.

- 3 days after the operation, patient developed left sided hemiplegia of sudden onset and progressive course associated with slurred speech.

- No history of fever, neck stiffness.

- No history suggestive of deep venous thromboembolism or other systemic embolization.
Past Medical history

- The patient was previously well.
- She is not known to be diabetic or hypertensive.
- Six times abortion and four times premature labour of still births.
Examination

• **General examination**
  - Patient is alert, oriented to time, place and persons, lying comfortable in bed, slurred speech.
  - Pallor, but no jaundice or cyanosis.

• **Vital signs**
  - Temp.: 38.3°C
  - Pulse: 100 bpm regular, big volume, equal on both upper limbs, weak lower limb pulsations, with collapsing character
  - Bp: 130/70 mmHg
  - R.R: 16 c/m
Systemic examination

• Neurological examination
  ➢ slurred speech.
  ➢ muscle state normal.
  ➢ muscle tone decreased in left side.
  ➢ Muscle power 0 on left side.
  ➢ Lost left UL & LL deep reflexes.
- **Chest examination**

No detected clinical abnormality.

- **Abdominal examination**

Points of laparoscopic intervention otherwise no detected clinical abnormality.
**Cardiac examination**

- Inspection & palpation: no pericardial bulge, no scar of previous operation.
- No visible epigastric, left parasternal or 2nd left intercostal pulsation.
- Apex: palpable in left 5th intercostal space inside mid-clavicular line, localized, ill-sustained, forceful, with no palpable thrill.
Auscultation:

- Muffled S1, normal S2.
- Pansystolic murmur over the mitral area, max intensity on mitral, radiated to the axilla.
- No additional sounds.
Investigations

1. **ECG**: Sinus tachycardia.

2. **MSCT of brain**: Right basal ganglionic sub acute ischemic infarct.
• **3. Fundus examination**: Bilateral normal fundus.

• **4. Duplex Doppler of arterial system of lower limb**: Atherosclerotic changes with mild stenosis of the middle third of ATA.
Laboratory Investigations

- CBC: WBC 15,000/m3, HB 7.5 g/dl, platelet 238,000/m3
- PC: 100%, INR: 1.1
- LFT: normal
- Kidney function: S. creatinine 1.4 mg/dl, increased to 4.7 mg/dl with use of gentamicin decreased to 2.5 mg/dl after its stoppage
- RF: +ve
- ESR: 106/122
- CRP: 126
Microbiological tests

- Three Blood cultures: were withdrawn on admission before antibiotic usage and patient managed as Infective endocarditis and received empirical treatment for native valve IE.

The cultures were negative, fungal culture was also negative.
Echocardiography
The clinical picture and past history of repeated miscarriage and still births plus negative blood cultures gave rise to suspicion of autoimmune abnormality and possibility of non-bacterial infective endocarditis.
Immunological tests

- were done that showed:

- negative ANA.

- Anticardiolipin IgM : 10.9  (normal up to 7).

- Anticardiolipin IgG : > 120  (normal up to 10).

- Lupus anticoagulant : 48  (normal up to 47 second).
Rheumatology consultation diagnosed as antiphospholipid antibody syndrome

patient diagnosed as non bacterial thrombotic endocarditis (NBTE)
Take Home Message

• NBTE is a condition characterized by the presence of sterile vegetations on cardiac valves and negative blood cultures.

• Diagnosis is difficult and relies on strong clinical suspicion in the course of disease process known to be associated with NBTE (e.g., SLE, APs).

• Presence of heart murmur, vegetations not responding to ABs and evidence of multiple systemic emboli rise the suspicion for NBTE.
Thank You