A 50-year-old male with generalized swelling

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Particulars the patient

Name	: Mr Abdus Salam
Age	: 50 years
Sex	: Male
Religion	: Islam
Occupation	: Retired service holder
Marital status	: Married
Present address	: Gournodi, Barishal
Permanent address	: Gournodi, Barishal
Contact no.	: 01728230872
Date of admission	: 11/01/2022
Date of examination	: 13/01/2022

Presenting complaints

- Distension of the whole abdomen for 1 month
- Generalized weakness for the same duration
- Swelling of both legs for 2 weeks
- Scrotal swelling for 7 days

History of present illness

According to the statement of the patient he was reasonably well 1 month back. Then he experienced gradual distension of the whole abdomen, which appeared first in the abdomen and was painless, not associated with any pain, fever, yellow coloration of skin or eye, bowel alteration, scanty micturition, vomiting, chest discomfort or shortness of breath. He took some medication which subsided the swelling and he continued regular life.

History of present illness

About 2 weeks later he noticed swelling of his both legs and then scrotal swelling developed about 1 week back. Simultaneously he experienced generalized weakness during his daily activities without any functional impairment.

He gives no history of puffy face, any urinary complaints, chest pain, joint pain, rash, vomiting of blood, black tarry stool or contact with TB patient.

History of present illness (Contd.)

On query, he gives history of occasional agitation, incoherent behavior and reports that he lost his job for such manners. He denies any headache, blurring of vision, convulsion or unconsciousness.

He is not known to be diabetic or hypertensive. For scrotal swelling, he got admitted into Department of Surgery, DMCH and later on was referred to Medicine department.

Past illness

- Nothing contributory

Drug history

- For swelling, he took tab. Furosemide on need.
- There is no history of any blood transfusion

Family history

- None of his family members experienced such illness.
- His parents died of aging process.
- Rest of his family members are leading a healthy life.

Personal history

- Smoker -10 pack year
- No history of any substance abuse or illicit sexual behavior

Socio economic status

- He belongs to a lower middle-class family.
- He lives in a brick-built house with access to proper sanitation and pure drinking water.

Immunization history

He is immunized according the available immunization schedule.

He is vaccinated against COVID – 19.

General examination

Appearance	Ill looking
Body built	Average
Nutrition	Normal
Co-operation	Co-operative
Decubitus	On choice
Anemia	Mild
Jaundice	Absent
Cyanosis	Absent

General examination (Contd.)

Clubbing	Absent
Koilonychia	Absent
Dehydration	Absent
Oedema	Pitting oedema present (++)
JVP	Not raised
Skin & body hair	Normal
Bony tenderness	Absent
Thyroid gland	No enlarged
Lymph node	Not palpable

General examination (Contd.)

Pulse	80 bpm, regular
Blood pressure	130/90 mmHg in supine position 130/80 on standing position
Respiratory rate:	12/minutes
Temperature	94^0F
Stigmata of Chronic Liver Disease	Absent
Bed side urine for protein	++

Systemic examination

Gastrointestinal system
Per abdomen:

Inspection:

- Abdomen is distended, flanks are full, umbilicus is everted
- No visible pulse, scar or swelling.
- Hair distribution is normal

Palpation:

- Abdomen is soft, non tender.
- Temperature is normal

- Liver is enlarged, about 4 cm from costal margin along the right mid clavicular line. Surface is smooth, non tender, margin is sharp. Upper border of liver dullness is present at right 5^{th} intercostal space along the mid clavicular line
- Spleen: just palpable
- Kidneys: not ballotable
- Para aortic lymph node: not palpable

Percussion:

- Shifting dullness is present

Auscultation:

- Bowel sound is present; No hepatic or renal bruit present.

Local examination of scrotal swelling

- Fluctuation test + ve
- Transillumination test +ve
- Get above the swelling negative
- Deep ring occlusion test negative

Digital rectal examination

Prostate is symmetrically enlarged, firm, non tender, surface is smooth with elastic texture.

Respiratory system

Inspection:

- No visible deformity, movement is normal

Palpation:

- Trachea is central;
- Chest expansibility diminished over right 6th intercostal space downwards along mid-scapular line
- Vocal fremitus is diminished over right 6th intercostal space downwards along mid-scapular line

Percussion:

Percussion note is dull over right 6th intercostal space downwards along mid-scapular line and normal over the rest of the lung field

Auscultation:

Breath sound is vesicular all over the lung field except right 6th intercostal space downwards along mid-scapular line where breath sound is diminished;

Vocal resonance is diminished over right 6th intercostal space downwards along mid-scapular line.

Nervous system examination

- Higher psychic function: Intact
- Cranial nerve examination including fundoscopy: Normal
- Motor examination: Normal
- Sensory examination: Normal
- Cerebellar examination: normal
- Signs of meningeal irritation: Absent
- Gait: Normal

Cardiovascular system

- Examination of precordium reveals no abnormality
- Peripheral pulses are normal

Examination of other systems

- Reveals no abnormality

Salient features

Mr Abdus Salam, 50 years old married, muslim, retired service holder got admitted into DMCH on 11/01/2022 with the complaints of ascites for 1 month, generalized weakness for the same duration, pedal oedema for 2 weeks and scrotal swelling for 1 week. He developed generalized swelling of the body 1 month back which gradually appeared first in the abdomen and then involved the legs and the scrotum.

Salient features (Contd.)

He gives no history of fever, yellow coloration of skin or sclera, cough, chest pain, shortness of breath, contact with TB patient, joint pain, rash, or any urinary complaints. Simultaneously he felt generalized weakness during his daily activities without any functional impairment. On query, he gives history of occasional agitation, incoherent behavior without any headache, blurring of vision, convulsion or unconsciousness. He is non diabetic.

Salient features (Contd.)

On general examination he is ill looking, mildly anemic, moderately edematous, pulse 80 bpm, blood pressure 130/80 mm Hg without any postural drop, bed side urine for protein reveals ++ protein. Liver is enlarged, about 4 cm from costal margin along the right mid clavicular line. Surface is smooth, non tender, margin is sharp. Spleen is just palpable. Shifting dullness is positive. Respiratory system examination reveals signs of pleural effusion at right 6^{th} intercostal space downwards along mid-scapular line. Other systems reveal no abnormality.

Problem list

Generalized Oedema	Anemia Proteinuria	Psychiatric illness
Hepato-splenomegaly	No joint pain, rash, fever	?

Provisional diagnosis??

Chronic Liver Disease with Portal Hypertension

Differential diagnosis

- Systemic lupus erythematosus
- Wilson’s disease

Investigations

CBC:

- Hb 9.9 gm/dL
- ESR 20 mm in 1st hour
- TC 2730/cmm
- DC
  - Neutrophil 72%
  - Lymphocyte 14%
- Platelet 78000/cmm

PBF: Pancytopenia

- S. creatinine: 0.89
- Urine R/E: +++ protein, 2-3 pus cell/HPF
- 24 hour urinary protein: 4.52 gm/ day, volume-1700ml
- S. albumin 2.92 g/dL
- S. electrolytes: Na-140, K-3.9, Cl-101
- S. lipid profile: Cholesterol 135, TG 262, HDL 32, LDL 95
- S. calcium: 8.3 mg/dl (Corrected Ca: 9.2 mg/dL)
- TSH: 3.14 IU

- S. bilirubin: 0.4 mg/dl
- SGPT: 20 U/L
- SGOT: 30 U/L
- ALP 281 U/L
- Prothrombin time: 14.4 sec
- INR: 1.05
- HBs Ag negative
- Anti-HCV negative
- FBS 7.4 mmol/L
- 2ABF: 14.3 mmol/L
- HbA1C: 8.9%

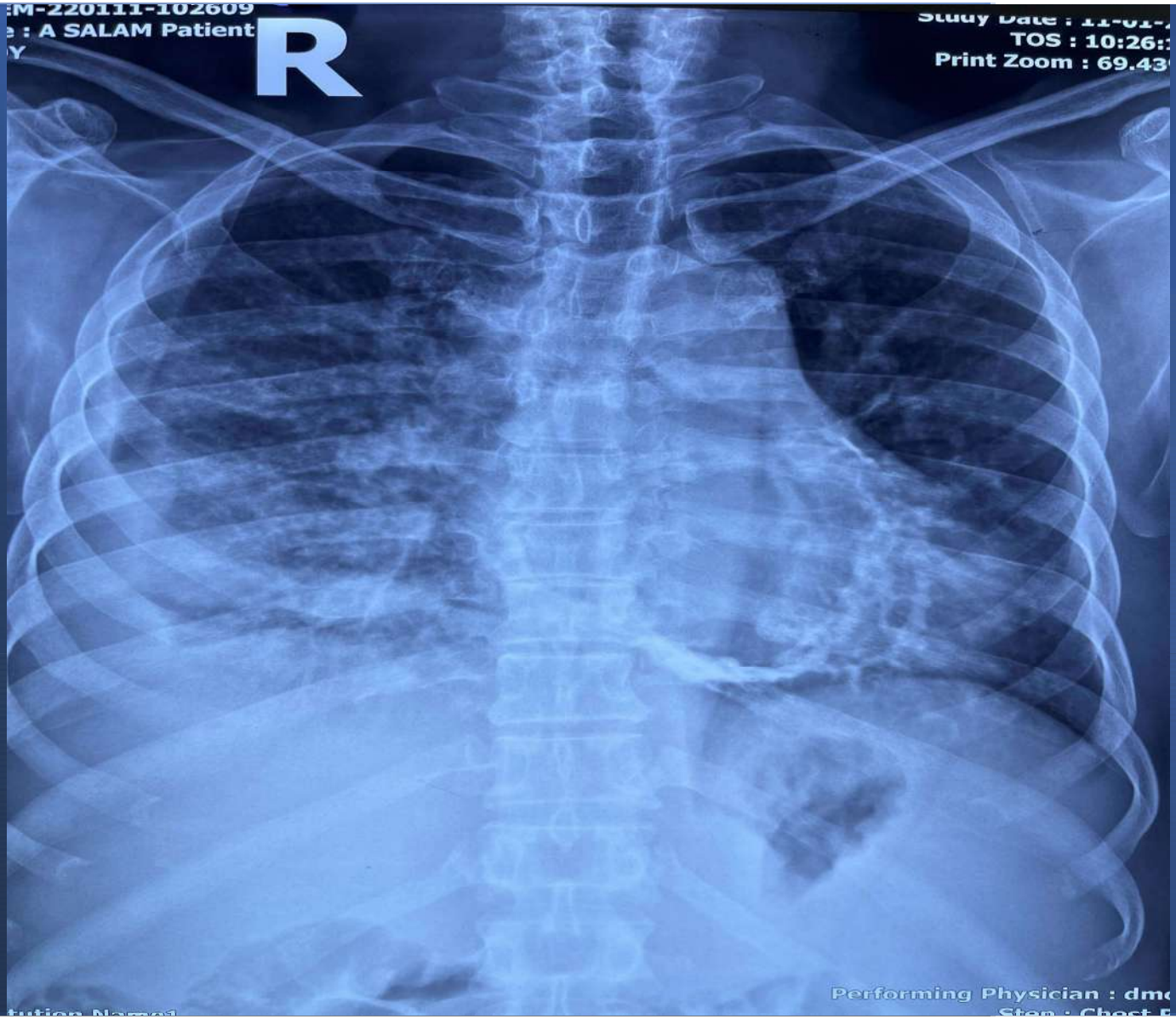
- 24 hour urinary copper: 10 mcg (ref: 20-50 mcg)
- Upper GIT endoscopy: Normal
- Eye examination for KF ring: Not found

Investigations (Contd.)

USG of W/A: congestive hepatomegaly, splenomegaly, bilateral renal parenchymal disease, moderate pleural effusion rt side, enlarged prostate.

USG of scrotum and testis: marked edematous scrotal wall, mild hydrocele- Rt

PSA: 0.7 ng/mL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Chest X-ray P/A view

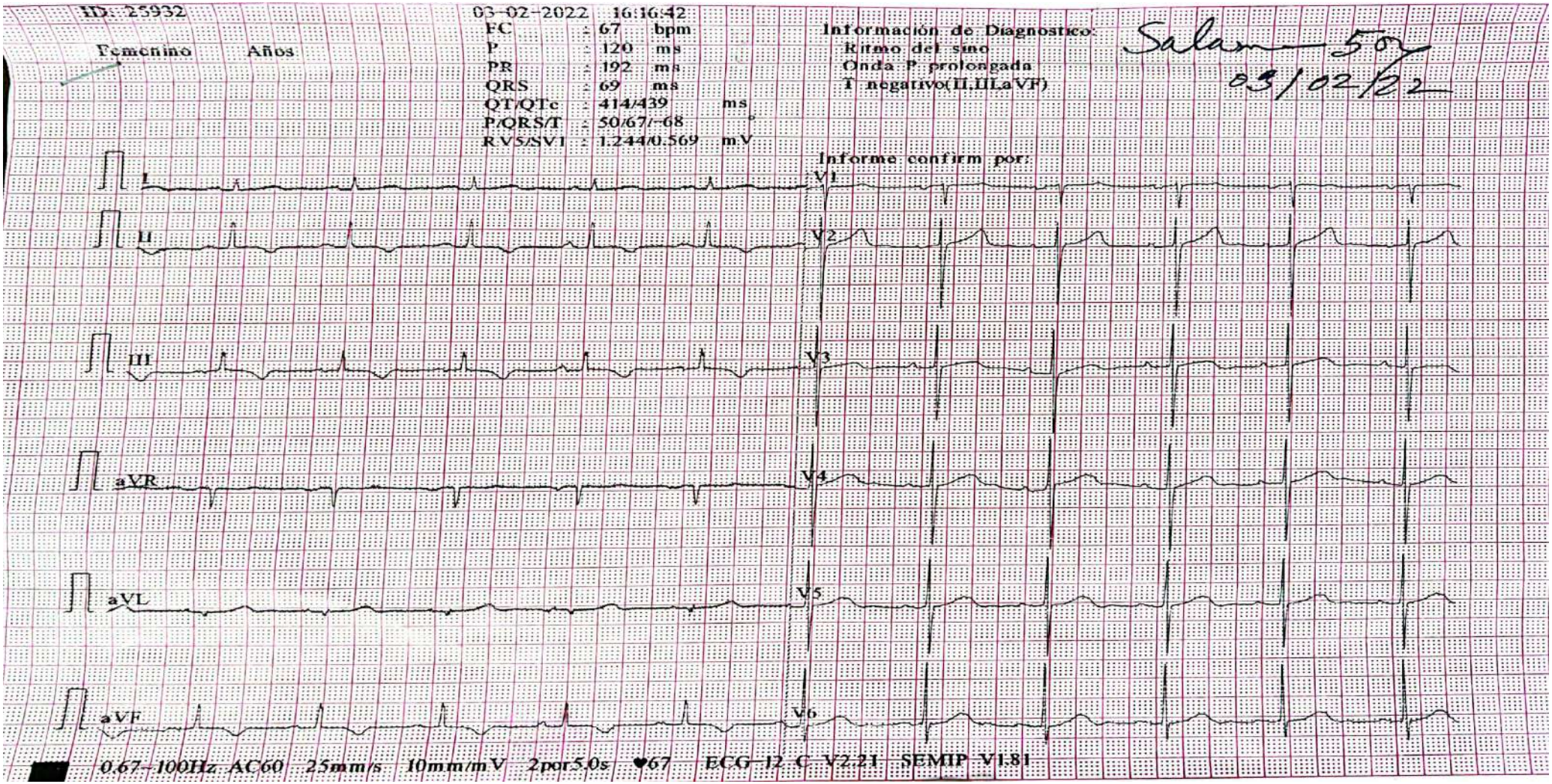
- Homogenous opacity is noted at right lower zone obscuring right costo-phrenic angle and lateral half of right hemi diaphragm, also ascending along right lateral chest wall, right hilum is slightly pulled downwards.
- Irregular calcifications are noted along the heart margin and super imposed over central part of cardiac shadow.

Comment: Right sided moderate pleural effusion with features of constrictive pericarditis

Pleural fluid study:

- Protein: 4.1 gm/dL
- ADA: 13 IU/L
- Malignant cell negative
- Gene Xpert: Negative

Sputum for AFB & Gene Xpert: Negative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03-02-2022 16:16:42
FC : 67 bpm
P : 120 ms
PR : 192 ms
QRS : 69 ms
QT/QTc : 414/439 ms
P/QRS/T : 50/67/-68
RV5/SV1 : 1.244/0.569 mV
Información de Diagnostico:
Ritmo del sino
Onda P prolongada
T negativo(II,III,aVF)
Informe confirm por:
Salas 50y
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I
II
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aVR
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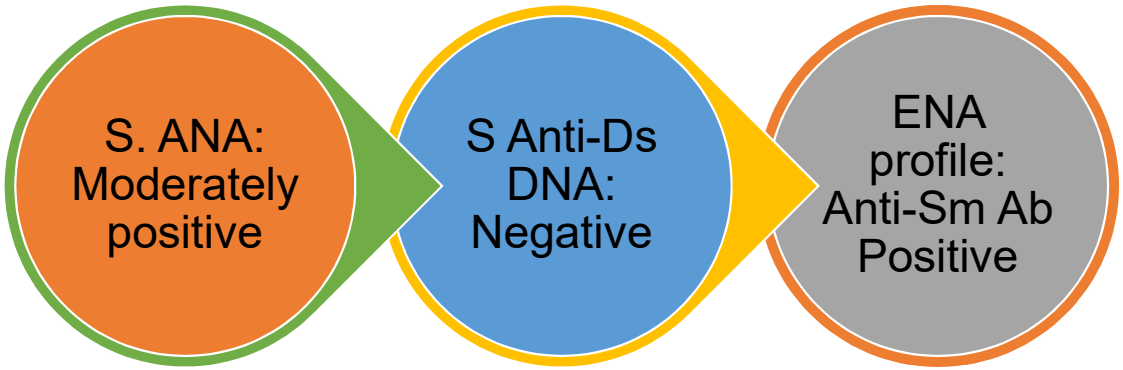
V1
V2
V3
V4
V5
V6
0.67-100Hz AC60 25mm/s 10mm/mV 2por5.0s ♥67 ECG-12-C-V2.21-SEMIP-V1.81

Echocardiography

- Good LV systolic function, LVEF 65%
- RA, RV, PA, IVC are dilated
- Pulmonary hypertension (PASP 70 mmHg)


What to do
next???

This is what we did



Entry criterion

Antinuclear antibodies (ANA) at a titer of ≥1:80 on HEp-2 cells or an equivalent positive test (ever)

↓

If absent, do not classify as SLE
If present, apply additive criteria

↓

Additive criteria

Do not count a criterion if there is a more likely explanation than SLE.
Occurrence of a criterion on at least one occasion is sufficient.
SLE classification requires at least one clinical criterion and ≥10 points.
Criteria need not occur simultaneously.
Within each domain, only the highest weighted criterion is counted toward the total score§.

Clinical domains and criteria	Weight
Constitutional	
Fever	2
Hematologic	
Leukopenia	3
Thrombocytopenia	4
Autoimmune hemolysis	4
Neuropsychiatric	
Delirium	2
Psychosis	3
Seizure	5
Mucocutaneous	
Non-scarring alopecia	2
Oral ulcers	2
Subacute cutaneous OR discoid lupus	4
Acute cutaneous lupus	6
Serosal	
Pleural or pericardial effusion	5
Acute pericarditis	6
Musculoskeletal	
Joint involvement	6
Renal	
Proteinuria >0.5g/24h	4
Renal biopsy Class II or V lupus nephritis	8
Renal biopsy Class III or IV lupus nephritis	10

Immunology domains and criteria	Weight
Antiphospholipid antibodies	
Anti-cardiolipin antibodies OR	
Anti-β2GP1 antibodies OR	
Lupus anticoagulant	2
Complement proteins	
Low C3 OR low C4	3
Low C3 AND low C4	4
SLE-specific antibodies	
Anti-dsDNA antibody* OR	
Anti-Smith antibody	6

Total score:

↓

Classify as Systemic Lupus Erythematosus with a score of 10 or more if entry criterion fulfilled.

In this case we found-

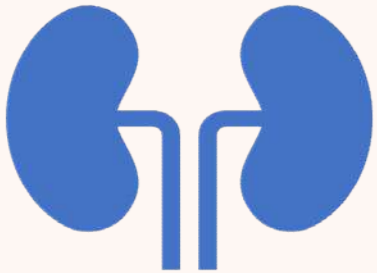
ANA positive with --

- Thrombocytopenia (4)
- Pleural/pericardial effusion (5)
- Proteinuria (4)
- Anti smith antibody (6)

Total score = 19

Confirmed diagnosis

Lupus Nephritis with calcific pericarditis with pulmonary hypertension with diabetes mellitus and benign enlargement of prostate



We planned for renal biopsy…..

But patient himself didn’t agree despite adequate counseling.

We started pulse methyl prednisolone

After treatment:

- His general condition improved.
- Oedema improved
- Post pulse therapy urine for protein was trace
- Now he is on Cyclophosphamide therapy, hydroxychloroquine, insulin and sildenafil.

Thank you