PROGRESSIVE RED SPOTS

TRICCER

Ali is a 9-year-old boy brought by his parents to see Dr. Salman at the dermatology clinic. Ali's mother informed the doctor that Ali started to have red spots on his both legs since yesterday. Both parents are concerned about these changes and if he could infect his brothers.

HISTORY OF PRESENTING COMPLAINT:

- Ali is a healthy 9-year-old boy who developed fever one week ago and he was given oral penicillin by his primary care doctor. Yesterday he started to have skin rash over both lower extremities. This rash has progressed proximally from both feet to thighs and was associated with mild swelling of both lower limbs.
- There was no history of bone or joint pain. No history of abdominal pain, diarrhea or change the urine color. No history of headache or changes in his appetite was detected.

PAST MEDICAL AND SURGICAL HISTORY:

 No history of chronic illnesses, hospital admission or surgery.

DRUG AND ALLERGY HISTORY:

Not known to have drug or food allergy.

FAMILY AND SOCIAL HISTORY:

- None of his family members have any skin condition.
- > Ali's mother is diabetic and has hypothyroidism .
- \succ He has 3 brothers and all of them are healthy .
- He is at the 3rd year elementary school. He is an average student in his class.

Discussion Questions:

- Are there words that you do not understand?
- Summarize the key information that you have obtained from history.
- Identify patient's new problems. Provide hypotheses for each problem.
- What further information would you like to know through clinical examination and Laboratory investigation?

Clinical Examination



(adapted from Rook's textbook of dermatology , 8^{th} edition)

Describe the lesions .



(adapted from emedicine.medscape.com)

Describe the lesions Which other sites you would like to examine?

Skin examination :

 Numerous non-blanching palpable purpura over both lower extremities extending from feet to the buttock. No ulcers, erosions or vesicles.

General Examination:

• Ali's body weight is 40kg and his height is 130cm. He looks well.

Vital signs

- Temp: 37.2
- HR: 98/min
- RR:25/min
- BP: 110/75
- 2 Palpable anterior cervical lymph nodes

Cadiovascular , chest and abdominal examination :

• Normal

CASE PROGRESS 1

After clinical examination Dr. Salman explains to Ali and his parents that he is most likely having vasculitis which is not infectious but there is a need for some blood tests, and for 2 skin biopsy to confirm the diagnosis also need to be evaluated by pediatrician to rule out any systemic involvement.

Would you like to do some investigations?

LAB RESULT

CBC

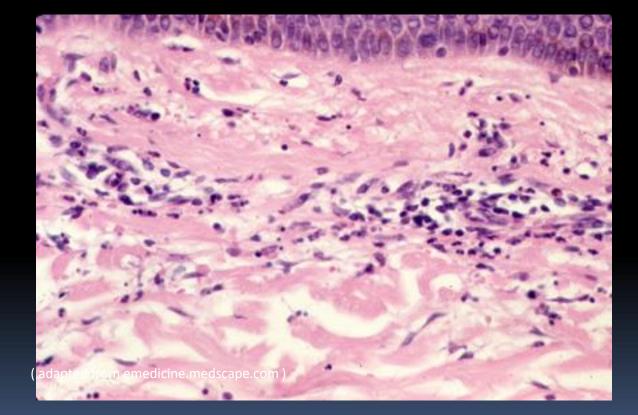
- WBC 16,900mm³
- Hb
- Platelet
- PCV 42%
- MCHC 320 g/L
- MCV 85 fL
- **ESR** 58 mm/Hr
- Urea and electrolytes within normal limit

13 g/100ml

240.000mm²

Urinalysis

- No hematuria or protein in the urine
- Anti streptolysin O titer 823 IU/L
- Throat culture negative
- ANA ~ negative
- Hepatitis screen negative
- Stool for occult blood negative



<u>SKIN BIOPSY REPORT:</u>

- There was perivascular and intravascular neutrophilic infiltrate associated with RBC extravasations (leucocytoclastic vasculitis)
- Direct immunoflourescence there was perivascular IgA deposition.

Questions:

- From your differential diagnosis what is your final diagnosis?
- Discuss the possible complication for this presentation?
- Discuss your treatment plan?

Case Progress 2:

- After biopsy result and laboratory investigations Dr. Salman explained to Ali and his parents that his condition is called Henoch-Schönlein purpura (HSP) which is an inflammatory disorder characterized by a generalized vasculitis involving the small blood vessels of the skin, GI tract, kidneys, joints, and, rarely, the lungs and CNS.
- Dr.Salman and the pediatrician explained to them that his condition is limited to the skin and no signs of systemic involvement either clinically or from investigations but he need hospital admission for few days for observation and further investigations.

Questions :

• Discuss the long term complications for this presentation?

