

Clinical Quiz

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A young patient with rash in the lower limbs

Clinical Presentation

A 16-year-old male patient, come to the clinic complaining of fever since 10 days, diarrhea, and abdomen pain, with skin rash since 3 days, joint pain since 2 days. On examination, there is a purpuric rash in the buttock and lower limbs (**Figure 1**).



Figure 1 - On examination, there is a purpuric rash in the lower limbs

Questions

1. What does the photograph show?
2. Mention a differential diagnosis?
3. What is the probable diagnosis?
4. What are the possible treatments options?

Clinical Quiz

Answers

1. Purpuric rash at both lower limbs.
2. a) Vasculitis (leukocytoclastic, polyarteritis nodosa). b) Emboli [Disseminated intravascular coagulation (DIC), acute meningococemia, rocky mountain spotted fever].
3. Henoch-Schonlein purpura. Skin biopsy shows a picture of leukocytoclastic angiitis
4. There is no specific treatment for Henoch-Schonlein purpura. Bed rest and supportive care, such as assuring adequate hydration, are helpful. Nonsteroidal anti-inflammatory drugs can relieve the joint and soft tissue discomfort. Corticosteroids have some use in patients with severe abdominal pain.

Discussion

Henoch-Schonlein purpura is a disease of children and young adults, with 75% of cases occurring between 2 and 11 years of age,^{1,2} peak incidence is 5 years of age. It occurs twice as often in males as in females. Henoch-Schonlein purpura is an inflammatory disorder of unknown cause characterized by IgA-dominant immune complexes in smaller venules, capillaries, and arterioles. It represents a diffuse vasculitis that is secondary to hypersensitivity. The disorder appears to represent a variety of leukocytoclastic angiitis initiated by deposition of immune complexes and can occur in response to infectious agents such as group A *Streptococci*, *Mycoplasma*, Epstein-Barr virus and Varicella virus. Parvovirus B19 and *Campylobacter enteritis* have also been associated with Henoch-Schonlein purpura.^{3,4} Henoch-Schonlein purpura may present as a triad of symptoms: a palpable purpuric rash on the lower extremities, abdominal pain or renal involvement, and arthritis. It can masquerade as many different conditions, depending on the symptoms. Purpura may be defined as visible, unbranching hemorrhages in the skin or mucous membranes that are 5-10 mm in diameter and often palpable.

The rash occurs in 100% of cases. Lesions typically appear on the lower extremities and buttocks, but may also involve the upper extremities, face and trunk, and are accentuated in areas of pressure (such as sock lines and the waistline). Classic lesions consist of urticarial wheals, erythematous maculopapules and larger, palpable ecchymosis-like lesions. Petechiae and target lesions may be present as well. These lesions may initially blanch on pressure but later lose this feature. The purpuric areas evolve from red to purple, become rust-colored with a brownish hue, and then fade. In more severe cases, hemorrhagic, purpuric or necrotic lesions may be prominent. It is mandatory to differentiate these lesions from those of meningococcal septicemia or other septic emboli or toxic vasculitides, such as those seen with drug reactions, iodides, and arsenicals.⁵

There is no specific treatment for Henoch-Schonlein purpura. Bed rest and supportive care, such as assuring adequate hydration, are helpful. Nonsteroidal anti-inflammatory drugs can relieve the joint and soft tissue discomfort. Corticosteroids have some use in patients with severe abdominal pain. However, corticosteroids are not recommended for treatment of rash, joint pain or renal disease alone.

References

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