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Ischemic stroke in a patient of henosch scon ein purpura: A case report and minireview.

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Introduction:
Henoch-Schönlein purpura (HSP) is the most common form of systemic vasculitis in children. HSP is self-limited in majority of cases and is characterized by Palpable purpura, Arthritis/arthralgia, Abdominal pain and Renal disease. Other organ systems may also be involved but are rare. Case reports and case series of various neurological manifestation including headaches, seizures, focal neurologic deficits, ataxia, and peripheral neuropathy in children with HSP have been documented. Cerebral lesions detected by neuroimaging in these HSP patients with CNS dysfunction include brain edema, intracerebral haemorrhage, sinus thrombosis, ischemic lesion and sometimes normal findings. We report a case of 14 years old girl with HSP who developed ischemic stroke during the course of purpuric rash.

CASE REPORT:
A 14 years old girl was admitted with complaints of severe abdominal pain and bloody diarrhoea. She had a history of sore throat with fever 8 days back. On examination She had palpable purpuric rash over her legs and buttocks. Otherwise, her vitals were stable with normal blood pressure, and other examination revealed no abnormality. Her blood investigations revealed normal platelet count and normal prothrombine time. Her routine urine analysis did not reveal any abnormality. She was diagnosed as HSP and treated with supportive measures. However on 3rd day of admission she developed acute right sided hemiparesis with facial palsy. With onset of such atypical feature, she was further evaluated for confirming HSP and to rule out other vasculitis and connective tissue disorders. Skin lesion biopsy was done which revealed leukocytoclastic vasculitis. Her ANA , c ANCA , P ANCA and antiphospholipid antibodies were negative. Her CT brain and MRI revealed left cortical MCA territory infarct. CT angiography also showed focal narrowing (25 -50%) of right ICA.

She was treated with intravenous high dose methyl prednisolone for 3 days followed by oral prednisolone. During her hospital stay her vitals , blood pressure and higher function remained normal. There were no new neurodeficits but with time there was some regain of power in right lower limb. With this clinical improvement she was discharged and advised further follow up. The patient didn't turn up for future follow up and so was not evaluated further.

Discussion:
Henoch-Schönlein purpura (HSP) is characterized by a tetrad of clinical manifestations: Palpable purpura in patients with neither thrombocytopenia nor coagulopathy, arthritis/arthralgia, abdominal pain and renal disease. HSP is primarily a childhood disease that occurs between the ages of 3 and 15 years. HSP is an immune-mediated vasculitis associated with immunoglobulin A (IgA) deposition. Although a variety of infectious and chemical triggers are recognized, the underlying cause of HSP remains unknown. Our patient had atypical features in form of absence of arthritis and hematuria. However the clinical context of presentation, the age , classical rash , gastrointestinal involvement along with skin biopsy findings makes the diagnosis obvious. Also various features of HSP develop over course of days to weeks particularly renal involvement, so may be further follow up examination would have revealed renal involvement in our patient.

Nervous system dysfunction in form of peripheral and CNS involvement have been seen in patients of HSP and may affect the long term prognosis in these patients. CNS involvement though commonest of nervous system dysfunction is rare as compared to other complications. CNS dysfunction results from a vascular obstruction , from an intracerebral haemorrhage or from severe hypertention. Cases of HSP with relevant ischemic stroke as a complication are rare. Possible causes for this complication include the presence of cerebral vasculitis and reduced levels of factor XIII and prothrombin. Still the etiology behind cerebral infarction remains obscure. The management of cerebral infarction in HSP patients is similar to that of severe complicated HSP, particularly HSP nephritis. Thus these patients are treated with intravenous pulse methylprednisolone followed by oral steroids.

Cerebral involvement in these patients may just represent a part of systemic vasculitis in HSP and though rare, our and previous few case report suggest that the possibility of neurological involvement should be considered in HSP cases with neurological manifestation.

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