Acute Pancreatitis Presenting as Seizures and Blindness

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Abstract
Acute pancreatitis presenting as seizures and blindness, is very rare. Purtscher’s retinopathy as the cause of blindness in acute pancreatitis; is not well known and rarely diagnosed condition by physicians. Here we report a case of acute pancreatitis presenting as seizures and Purtscher’s retinopathy.

Introduction
Diminution of vision is a rare complication of acute pancreatitis, which is called Purtscher’s retinopathy. Here we report a case of acute pancreatitis presenting as seizures with Purtscher’s retinopathy.

Case Report
35 yr old male patient, an agricultural worker following a binge of alcohol developed abdominal pain and two episodes of seizures. He was a chronic smoker and an alcoholic. He was initially evaluated in a local hospital with basic blood investigations and CT brain. As there was no significant abnormality detected he was referred to our hospital for further evaluation.

In our hospital, on eliciting history, he also complained of diminution of vision. Examination revealed a conscious, oriented and malnourished patient. CNS examination was essentially normal except fundus examination which showed bilateral cotton wool spots. Abdominal examination was unremarkable except for epigastric tenderness, cardiovascular and respiratory system was normal.

With the above findings we came to a provisional diagnosis of Purtscher’s retinopathy due to pancreatitis. We also wanted to exclude retroviral disease. Ophthalmologist opinion was taken pending biochemical results, who opined as cotton wool spots in both fundi - ? Purtscher’s retinopathy, to rule out retroviral disease.

Investigations revealed – Hb-10 g%, TC- 12,200 cells/cubic mm, DC- N70%, L29%, E1%, ESR- 50mm/hr, PCV- 28, platelet count- 2.1 L/mm, Urea- 48, Creatinine-1.4 mg/dL, Sodium-128 meq/l, Potassium-4.5 meq/l, Calcium-8.3 mg/dL,Bilirubin-1.1 mg/dL, SGOT-49 U, SGPT-50 U, SAP- 130U, Protein (T)-5.3 g/dL, Alb- 3.3 g/dL, Amylase-502 U/L, Lipase-490 U/L, HIV ELISA – neg. CT abdomen showed pancreatic edema and inflammation suggestive of acute pancreatitis.

A final diagnosis of alcohol induced acute pancreatitis with Purtscher’s retinopathy was made. He was treated with i.v. fluids, octreotide, pancreatic enzymes and proton pump inhibitor. He made a steady recovery and was discharged a week later with an advice to abstain from consuming alcohol.

Discussion
Acute pancreatitis should be suspected, especially in patients with risk factors like alcohol abuse, cholelithiasis, on drugs like valproate, tetracycline, furosemide, thiazide, abdominal surgery or trauma. This condition has varied clinical manifestations and cannot be picked up unless suspected. It can present with manifestations involving any organ system in the body; abdomen- severe epigastric pain with radiation to back (most common), nausea, vomiting, fever; respiratory system- breathlessness, ARDS, pleural effusion; cardiovascular system- tachycardia, hypotension, shock; nervous system- seizures, altered sensorium, haematological- coagulation abnormalities ranging from isolated intravascular thrombosis to severe disseminated intravascular coagulation. It can be easily confirmed by doing serum amylase, serum lipase which would be elevated and CT abdomen which shows features of acute pancreatitis.

Purtscher’s retinopathy was first described in 1910 in patients suffering severe head injury who presented with sudden loss of vision, within hours of sustaining injury. Association between Purtscher’s retinopathy and acute pancreatitis was first reported by Inkeles and Walsh in 1975. Exact incidence is not known. According to a study in United Kingdom the incidence is around 0.24 patients per million population. Pathophysiology remains controversial. Retinal arterial occlusion by embolization causing infarction of the microvascular bed is the most accepted mechanism. Cause of emboli includes leukocyte aggregation induced by complement C5a, fat emboli from enzymatic digestion of omental fat. Most common retinal findings in Purtscher’s retinopathy are cotton wool spots around optic nerve and intraretinal haemorrhages. Less reported findings include serous detachment of macula, pre retinal haemorrhages, dilated vessels, optic disc edema, retinal microinfarcts, late findings include pigment migration and optic atrophy. Other conditions associated with this retinopathy include lymphoproliferative disorders, bone marrow transplantation and blunt injury chest. There is no proven treatment of this retinopathy, only control of underlying disease is indicated.

This case is presented here to highlight the importance of suspecting acute pancreatitis, which can present with varied manifestations and also to highlight Purtscher’s retinopathy, a rarely diagnosed entity by physicians.

References