

Orbital cellulitis – An Unusual First Clinical Presentation in Undiagnosed Diabetic Patient

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Case Report

Abstract: Orbital cellulitis is a common condition seen by ophthalmologists. But first time presentation of orbital cellulitis & proptosis because of undiagnosed uncontrolled diabetes and the patient being unaware of diabetes is a rare occurrence. This condition in uncontrolled diabetic patients can lead to serious morbidity and CNS complications. This article presents the importance of screening of ophthal patients above 40years, which can help in decreasing the rate of complications seen in undiagnosed diabetic patients by ophthalmologists.

Key Words: Orbital cellulitis, Proptosis, Uncontrolled, Undiagnosed Diabetes Mellitus.

Introduction

The WHO data estimate the number of diabetic patients in Asia and India alone to be 52.4 million. This number is expected to reach 121.8 million over the next 25 years. Worldwide, about 300 million people are expected to have diabetes by 2025, affecting 5.4% of the world's population. Changing dietary and exercise trends appear to play a major role in the increasing prevalence of diabetes mellitus. With such an increasing rate of prevalence of diabetes, the rate of complication associated with diabetes has also increased. It is seen that diabetic patients can have unusual presentation. Here we report a case of orbital cellulitis, the only clinical picture and a rare presentation in an undiagnosed diabetic patient.

Case Report

A 45 yrs female came with complains of pain in right side of the face since 5 days, diminution of vision since 3 days and diplopia for 3 days and at the time of presentation patient had no diplopia. For the above complains patient went to some private practitioner (records not available) who gave her some medication but her condition deteriorated. She gave history of hypertension since 7-8 yrs. (She was on tab. Amlodepein 5mg OD). She did not go for follow up for the same since 2 years. There was no history of any other systemic illness. On ocular examination her right eye vision was no perception to light and left eye vision was 6/24 unaided. She had right sided facial oedema with peri-orbital oedema. There was complete ptosis with axial proptosis (19.5mm from lateral

orbital margin), tenderness was present. On eversion of the right eye upper lid, chemosis and conjunctival congestion was present, cornea was hazy and oedematous and pupil was fully dilated, not reacting to light. On tonometry (by Shicotz), tension was 24.4mm of Hg and all extra ocular movements were absent. On fundus examination of the right eye optic disc was pale, general fundus was pale, thread like arteries were seen, veins were of normal dimensions, cattle track appearance seen in supero-temporal quadrant and cherry red spots were present at macula. All the above clinical findings confirmed right eye orbital cellulitis with total ophthalmoplegia and Central Retinal Artery Occlusion (as the result of hypertension). Sac syringing was done and sac was patent and patient was advice routine investigations and X-ray PNS. Patient was given local and systemic antibiotics and analgesics. On investigations patient was found to have BSL 348 mg/dl and 3+ sugar in urine. X-ray PNS showed collection in maxillary sinus. Patient was admitted, i.v antibiotics and s/c insulin were started under physician care. M.R.I confirmed the clinical diagnosis of orbital cellulitis with collection in maxillary sinus suggestive of maxillary sinusitis. The condition of the patient further deteriorated. Patient became disoriented and was shifted to M.I.C.U.

Discussion

The world wide prevalence of Diabetes has risen dramatically over the past two decades, from an estimated 30 million cases in 1985 to 177 million in 2000. Based on current trend more than 360 million people will have diabetes by the year 2030.^[1] Awareness of screening for diabetes mellitus by regular 6 monthly/yearly BSL examinations has become more important in view of increasing incidence of diabetes. Long term complications due to poor glycemic control of diabetes mellitus include Heart attacks, strokes, kidney failure, diabetic retinopathy and many other systemic as well as local complication leading to high rate of morbidity and mortality in patients suffering from diabetes. Rare

complications include orbital cellulitis and cavernous sinus thrombosis. [2,3] Thus it becomes very important to screen the population especially after the age of 40 yrs. So that proper treatment can be started at an early stage, which can reduce the rate of complications in such patients. This patient was examined and investigated and was found to have very high blood sugar levels and the ophthalmic findings suggestive of orbital cellulitis, which is a serious condition and the management of orbital cellulitis involves urgent intravenous antibiotics, systemic rehydration and treatment of any underlying systemic disease (e.g., diabetes, renal failure). [4] Thus in this patient, diabetes was diagnosed very late, when she developed orbital cellulitis and presented with proptosis and total ophthalmoplegia.

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Photo 1: Patient at the time of presentation with proptosis and complete ptosis



Photo 2: Chemosis and total ophthalmoplegia