Idiopathic Intracranial Hypertension as the Initial Manifestation of Chronic Myeloid Leukemia: Letter to Editor

Chronic myeloid leukemia is usually insidious in onset, and most of the patients present in the chronic phase. Occasionally, unusual symptoms such as priapism, spinal cord compression, thrombosis or bleeding and bone lesions may be the initial presentation. We report a patient who presented initially with features of idiopathic intracranial hypertension (IIH).

A 32 year old female presented with blurring of vision and headache of one month duration. There was no history of trauma, menstrual dysfunction, use of oral contraceptives or significant drug intake. Her last child birth was 7 years ago. There was no history of any venous thrombosis or family history of stroke or coronary artery disease in the young. On physical examination, she was thin built (wt. 38 kg) with blood pressure of 120/70 mm Hg. She had mild pallor and spleen was palpable 10 cms below the left costal margin. There was no lymphadenopathy. Visual acuity was 6/18 in both eyes. Ocular movements and pupillary reaction were normal. Ocular fundi showed bilateral papilledema and there were no other retinal changes. Perimetry showed enlarged blind spots. Fluorescein fundus angiogram showed papilledema without any evidence of retinal vasculopathy. Investigations revealed haemoglobin of 10.5 g/dl, white cell (WBC) count of 205x10^9/L, platelet count of 180x10^9/L and ESR of 24 mm 1st hour. Liver and renal functions were normal. Peripheral smear findings were consistent with features of chronic myeloid leukemia in chronic phase. Bone marrow karyotype showed Philadelphia chromosome positivity. CT scan of the brain was normal. Lumbar puncture showed cerebrospinal fluid pressure of 270 mm of water with protein level of 38 mg/dl and no cells. She was treated with acetazolamide, diuretics and hydroxyurea. Her WBC count returned to normal in two weeks time. Her vision improved gradually and during the last follow up her visual acuity was normal and papilledema had regressed completely.

Idiopathic intracranial hypertension (IIH) can be associated with a number of conditions. Common associations include obesity, hypervitaminosis A and systemic hypertension. However, association with chronic myeloid leukemia is extremely rare. The most popular hypothesis regarding origin of IIH is reduced CSF absorption. Raised ICP and subsequent papilledema in our patient may be the result of a very high WBC count, leading to hyperviscosity state, which resulted in dysfunction of the absorptive mechanism of the arachnoid granulations. The disturbed CSF absorption may have led to the IIH in our patient.

K. Pavithran, M. Thomas
Department of Hematology, Medical College Hospital, Thiruvananthapuram-695011, Kerala, India.

References