

## Celiac Crisis

Celiac crisis is a very rare complication associated with celiac disease and has not been highlighted in the literature.<sup>(1)</sup> We report a 7-year-old male child presented to us with recurrent loose stools which were watery, and moderate to large in amount since 1.5 years of age. He had received treatment in the form of multiple antibiotics, antimotility agents, anthelmintics but the loose stools did not respond and continued to recur episodically, lasting for about 10-20 days every two or three months. On admission, the child was in shock with severe dehydration. He weighed 12 kg (66%) and had a height of 99 cm (84%). There was pallor and knuckle pigmentation.

Systemic examination revealed gaseous distension of abdomen, absent bowel sounds, tachypnea with crepitations audible in right mammary area. The child was revived with IV fluids. There was severe hypokalemia, with a potassium level of 2.8 meq/L. The child also had paralytic ileus. The child had carpopedal spasm on day 2 of admission. Total calcium was 5.2 mg/dL. The child also had hypoalbuminemia with albumin of 1.2 g/dL. The carpopedal spasm resolved with calcium and magnesium supplementations. The arterial blood gas analysis revealed acidosis. He had hemoglobin of 9.5g/dL with a dimorphic type of anemia. The chest x ray showed pneumonia in the right lung. The blood and urine cultures were sterile. The HIV status was negative and stool examination did not suggest any infective etiology.

The serum tissue transglutaminase antibodies (tTGA) titres came elevated as 105 U/mL(0-10). The endoscopy revealed grooving of the folds. The histopathology of the duodenal biopsies revealed subtotal villous atrophy and increase in the intraepithelial lymphocytes.

The child was started on a gluten free diet (GFD), oral iron, folic acid and calcium

supplements. He showed remarkable improvement, his diarrhea disappeared and he gained weight and height over one year follow up. The repeat tTGA levels came as 10 IU/mL after 8 months of follow up.

Celiac crisis is a life threatening complication of celiac disease. Clinically, it is characterized by severe diarrhea, dehydration and metabolic disturbances like hypokalemia, hypomagnesemia, hypocalcemia, hypoproteinemia, *etc.* Various precipitating factors identified for crisis are severe malnutrition, infections, hypoproteinemia, and poor compliance to gluten free diet, bacterial overgrowth in setting of altered motility in celiac disease and anticholinergic drugs. The possible precipitating factors in present patient are severe hypokalemia, hypoproteinemia and infection. Prompt recognition of condition and the timely treatment of various complications made the difference in the outcome of the present case. There are two case reports of celiac crisis published from our centre<sup>(2,3)</sup>.

In the earlier case reports authors have used corticosteroids for variable periods. But over the time it was realized that early recognition of celiac disease and then gluten free diet in these patients is quite helpful to tilt the balance.

**Anuj Walia,  
B.R. Thapa,**

*Department of Pediatric Gastroenterology,  
Hepatology and Nutrition,  
PGIMER, Chandigarh 160 012, India  
Email: anujwalia03@yahoo.com*

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