Brief Communication

Diabetic neuropathic cachexia in a young female

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ABSTRACT

A 42-year-old lady, a known diabetic presented with generalized body ache, severe burning sensation over her lower limbs, loss of weight (approximately 8 kg), loss of appetite, nausea, frequent vomiting, and altered bowel habits without history of fever or pain abdomen. Symmetrical wasting was noted in all limbs with bilateral proximal muscle weakness, particularly of lower limbs. Ankle jerks were absent with symmetrically decreased reflexes. nerve conduction velocity (NCV) revealed symmetrical distal axonal and demyelinating type of sensorimotor polyneuropathy. Hematological and gastrointestinal (GI) malignancy were excluded. Patient responded to antidepressants.

Key words: Cachexia, diabetes, diabetic neuropathic cachexia, neuropathy

Introduction

The term, diabetic neuropathic cachexia[1] was coined in 1974. Patients had bilateral symmetrical peripheral neuropathy along with severe emotional disturbances, anorexia, and impotence. They had mild diabetes, simultaneous onset of neuropathy, and without presence of other specific diabetic complications. All patients recovered spontaneously in about 1 year. Because of the cachectic appearance, the term 'diabetic neuropathic cachexia' was suggested. The patients were all males and in the 6th decade of life in the original report.[1] The patient described here was fitting the diagnosis. But, it was a female patient and she was relatively young. Only, few female cases have been reported in literature.[2-4] Because of clinical presentation, this syndrome is often confused with neuropathic carcinomatosis or an occult cancer.[2]

Case Report

A 42-year-old house wife (P2 + 0, last child birth 24 years ago) was admitted with complaints of generalized body ache of 1 year duration. It was more at night and progressively increasing in severity. The patient had numbness and severe burning sensation over her feet, ascending rapidly to involve her legs and thighs. It was associated with loss of weight (approximately 8 kg), loss of appetite, nausea, frequent vomiting, and altered bowel habits without history of fever or pain abdomen. She was detected to have diabetic 1 year ago and put on oral hypoglycemic agents (OHAs). There was no history suggestive of any acute diabetic complication. Past medical history was nonsignificant. She had undergone cholecystectomy 2 months back (Histopathological examination (HPE) suggestive of chronic cholecystitis without malignant change). She was amenorrhoic for last 2 months. On admission, she was biochemically euthyroid with normal creatinine phosphokinase (CPK) level, negative antinatriuretic factor (ANF), rheumatoid factor, anti-double stranded deoxyriobonucleic acid (dsDNA), and poor glycemic status (HbA1C 16.9%).

Examination

Weight: 36.5 kg, body mass index (BMI): 15.7 kg/m^2, blood pressure (BP): 100/70 mmHg, pulse: 70/min, regular, all peripheral pulses palpable, pallor: +, icterus: nil, edema: nil, goiter: Gr I, acanthosis: absent, muscle function test (MFT): 6/6 b/l, ankle brachial pressure index (ABPI): left 0.9, right 1.0. Fundus was normal. Profound symmetrical wasting was noted in all extremities with associated bilateral weakness more in proximal muscle groups of the lower extremities. Reflexes were symmetrically decreased in all extremities with absent ankle jerks. The gait was unsteady due to

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muscle weakness and paresthesias. Otherwise, systemic examination was normal.

Investigations

Hemoglobin (Hb): 9.4; total leukocyte count (TLC): 12,400; differential leukocyte count (DLC): neutrophils (N)-78, lymphocytes (L)-18, monocytes (M)-2, eosinophils (E)-2; erythrocyte sedimentation rate (ESR): 86; adequate platelet.

Renal and hepatic profile was normal except hypoproteinemia (albumin/globulin (Alb/Glb):2.6/2.2) and hypokalemia. Human immunodeficiency virus (HIV) was nonreactive. Serum protein electrophoresis did not show any monoclonal band. Whole body bone scintigraphy and bone marrow aspiration study were normal. Nerve conduction velocity (NCV) revealed symmetrical distal axonal and demyelinating type of sensorimotor polyneuropathy involving lower limbs more than upper limbs. Computed tomography (CT) scan abdomen suggested hepatomegaly with mildly dilated common bile duct (CBD) (post cholecystectomy) along with suspected stricture ileum along with proximal narrowing. Chest X-ray, CT scan brain, ultrasonography (USG) abdomen, upper gastrointestinal (GI) endoscopy, colonoscopy, Ba meal follow through, CT enteroclysis were normal.

Discussion

This 42-year-old known diabetic female was admitted in our department with complaints of generalized body ache with disturbed sleep, anxiety, and irritability for 1 year, which was progressively increasing in severity along with history of significant loss of weight (total 14 kg), nausea, frequent vomiting, and altered bowel habits with intermittent diarrhea and constipation. She was investigated initially to exclude hematological malignancy in the background of generalized bone pain and raised ESR. GI malignancy was also excluded considering significant loss of weight, anorexia, nausea, frequent vomiting, and altered bowel habits. CT scan abdomen suggested suspected stricture ileum along with proximal narrowing which was not supported by colonoscopy, Ba meal follow through, and CT enteroclysis. She was in very much depressed state and lost weight (approximately 6 kg) during institutional management. Antidepressant was added as per advice of psychiatrist. NCV revealed symmetrical distal axonal and demyelinating type of sensorimotor polyneuropathy involving lower limbs more than upper limbs. She was managed conservatively and two units of whole blood was transfused. Her blood sugars were fairly controlled throughout the hospital course even without any medication. Patient was discharged in relatively stable condition with a diagnosis of diabetic neuropathic cachexia.

At follow-up (1 month) our patient was found to be relatively symptom free with weight gain of 1 kg. Our experience highlights that diabetic neuropathic cachexia may occur in young female and responds to psychopharmacological support. Though it is a diagnosis of exclusion, low threshold of suspicion will help to reach the diagnosis and reassure patient and near relatives to get rid of the problem because of overall good prognosis.

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