A case of postprandial painful abdominal spasm in SCI patient with severe thoracic lordoscoliosis

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INTRODUCTION

It is common for spinal cord injury (SCI) in early childhood to progress into severe thoracolumbar kypholordosis or scoliosis with growth spurt. This affects not only the cardiopulmonary function or the gastrointestinal function, but also various pains. The case we are reporting is about postprandial spastic pain of the abdomen in a SCI patient with severe thoracic lordoscoliosis (Fig 1.), related diagnostic processes, and treatments for the problems.

CASE REPORT

A 39-year-old female is a patient with T4 AIS A since thoracic spine fracture due to a fall from seven meters height at nine years old. Patient complains of the postprandial epigastric discomfort with subsequent spasm of abdominal muscles. The spasm and pain of the abdomen extend to her back and posterior neck and it persists postprandially over 2 or 3 hours. She had been taken many medications for the pain and spasticity, and the polypharmacy led unexpected constipation. The patient has been spending all days in prone position for over 20 years with no wheelchair use, Resulting in severe thoracic lordosis and right scoliosis. The lying posture Results a vicious circle including poor oral intake, weight loss, and postprandial abdominal painful spasm. However, cardiopulmonary problems associated with spine deformity are not significant in the parameters. The urodynamic study showed low compliance and severely decreased cystometric vesical volume, but no detrusor overactivity. There was a symptomatic autonomic hyperreflexia with bladder filling at small volume. Symptoms of autonomic dysreflexia disappeared with continuous drainage of the bladder using indwelling Foley catheter. Studies for evaluation of the problem Resulting in postprandial painful spasm of the abdomen were focused to rule out any intraabdominal or intrapelvic pathology. Abdominal ultrasound, computed tomography scan revealed no abnormality relevant to the problems. Upper gastrointestinal (GI) barium test confirmed the stomach obstruction due to compression by the lordotic thoracic spines (Fig 2.). With the suspected diagnosis, most of the medications were discontinued except baclofen 20 mg three times a day. The patient was recommended taking baclofen 30 minutes prior to the meals and sitting or head-up supine lying as her tolerance, with significant improvement of the symptoms.



Fig. 1. Thoracolumbar spine x-ray

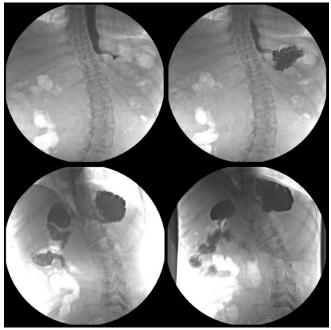


Fig. 2. Upper GI barium study