has been proposed that GI hemorrhage predisposes to SBP. Sorell et al found that rats with surgically-created portal hypertension had a significantly higher incidence of bacterial translocation and bacteremia. Also, after portal vein thrombosis, hepatopetal collaterals take time to develop. Before their development, blood from the intestines is shunted away from the liver, and so the gut bacteria may escape the RES of the liver. Lastly, ascitic fluid protein was low in our patient; low ascitic protein has low opsonic activity, a known risk factor for SBP.

References


Correspondence to: Dr Sahni, 3902 City Ave, Apt B315, Philadelphia, PA 19131, USA. E-mail: valbhovahsni@hotmail.com

Received January 20, 2006. Accepted February 26, 2006

Intestinal pseudo-obstruction as initial presentation of thymoma

Musthafa C P, Ahsan Moosa,* Chandrashekharan A P,** Nandakumar R, Narayanan V A, Balakrishnan V

Departments of Gastroenterology, *Neurology and **Thoracic Surgery, Amrita Institute of Medical Sciences, Amrita Lane, Elamakkara P O, Cochin 682 026

A 45-year-old-man presented with severe vomiting, constipation, abdominal distention and bilateral ocular abductor palsy. Evaluation revealed diffuse autonomic dysfunction characterized by intestinal pseudo-obstruction, xerophthalmia, xerostomia, postural hypotension, erectile dysfunction and loss of sinus arrhythmia. Paraneoplastic work-up revealed thymoma. Most symptoms resolved after surgical removal of the thymoma. Six weeks later he developed worsening of external ophthalmoparesis with ptosis, responding to acetylcholinesterase inhibitor, confirming myasthenia gravis. [Indian J Gastroenterol 2006;25:264-265]

Intestinal pseudo-obstruction, characterized by symptoms and signs of bowel obstruction in the absence of mechanical causes, is an uncommon problem in adults. Common tumors that lead to intestinal pseudo-obstruction include small-cell lung cancer, breast cancer and pancreatic cancer.

A 45-year-old gentleman was referred for evaluation of persistent vomiting, constipation and abdominal distention of 1-month duration and diplopia of 2 weeks’ duration. Further questioning revealed dryness of mouth and eyes, altered taste perception, and loss of early morning penile erections. He had lost 5 Kg despite normal appetite. He was a teetotaler, non-smoker, and denied drug addiction. There was no other significant medical history.

On examination, weight was 50 Kg, BMI 18.4 Kg/m², heart rate 80 per minute, blood pressure 110/70 mmHg, with postural drop of 40 mmHg in systolic blood pressure. Abdomen was soft, bowel sounds were diminished. Neurological examination showed bilateral abductor palsy, but was otherwise normal. Cardiovascular, respiratory and rheumatologic examination was also normal.

Investigations: hemoglobin 13.6 g/dL, WBC count 10.5 x 10⁹/µL. Urine examination was normal. Liver and renal profile were normal, calcium 9.1 g/dL, HCO₃ 25 mmol/L, blood sugar 98 mg/dL. CSF showed no cells, glucose 81 mg/dL, protein 55 mg/dL. ANA, RA factor and screening for HIV were negative. Thyroid function tests and serum cortisol was normal. Carcinoembryonic antigen, CRP, and Mantoux test were negative. X-ray chest, ultrasonography and CT abdomen with contrast, MRI brain and MR angiography were normal. Esophago-gastro-duodenoscopy showed stasis in the stomach but was otherwise normal. Small bowel follow-through, which was done at the referring hospital, was normal. However, plain X-ray abdomen done at our hospital showed persistence of barium in the ileum and right side of the colon, despite lapse of 4 weeks. Colonoscopy was normal.

Detailed autonomic function tests were done. ECG showed fixed RR interval and loss of sinus arrhythmia; there was poor BP elevation to mental arrhythmic and cold stimuli, and decreased tear secretion, which was confirmed by Schirmer’s test. The diagnostic work-up for myasthenia gravis, including neostigmine test, repetitive nerve stimulation for decremental or incremental response, blink response and facial conduction during motor and sensory nerve conduction tests were normal. EMG showed no features of myopathic process.

We considered intestinal pseudo-obstruction and dysautonomia of possible paraneoplastic origin. CT scan of thorax revealed a soft-tissue mass in the anterior mediastinum with heterogeneous enhancement, suggestive of thymoma. During surgery, a mass measuring 7 cm x 4.5 cm x 3 cm without capsular invasion was removed from the left lobe of thymus. Histological examination confirmed lymphocyte-predominant thymoma (Fig), without capsular invasion (type B1, WHO classification). Following surgery, vomiting and constipation subsided, with improve-
ment of diplopia and dryness of mouth and tongue. However, six weeks after surgery, he developed features of myasthenia gravis with bilateral fatiguable ptosis and worsening of ophthalmoparesis, which responded to pyridostigmine and a short course of oral prednisolone. He is off medication and is asymptomatic during the last 18 months.

Chromic gastrointestinal pseudo-obstruction (CGIP) is a classical paraneoplastic syndrome. Its occurrence with thymoma is extremely rare even though several paraneoplastic manifestations have been reported in association with thymoma, including myasthenia gravis, Eaton-Lambert syndrome, subacute autonomic neuropathy, and neuromyotonia.

Pande and Leiss reported a patient with thymoma presenting with intestinal pseudo-obstruction, myasthenia gravis and neuronal anti-acetylcholine receptor antibody. Vernino et al. have reported seven patients who had myasthenia gravis with subacute autonomic failure ranging from isolated gastroparesis to severe pan-autonomic failure. Despite extensive cholinergic dysautonomia, pupil sparing in our patient was similar to 5 of the 7 cases in that series.

Antibodies against nicotinic acetylcholine receptors present on skeletal muscles endplate result in myasthenia gravis; antibodies to neuronal nicotinic acetylcholine receptors present on autonomic ganglia have been reported to be associated with paraneoplastic autoimmune autonomic neuropathy. We hypothesize that our patient had both these antibodies. Acetylcholine receptors on the neuromuscular junction and autonomic ganglia share some structural features. Antibodies specific for ganglionic acetylcholine receptors are found in a majority of patients with paraneoplastic subacute pandysautonomia. These antibodies have the potential to impair synaptic transmission at autonomic ganglia. As both sympathetic and parasympathetic ganglia utilize nicotinic cholinergic synapses, antibodies interfering with ganglionic transmission can cause pan-dysautonomia.

References

Correspondence to: Dr. Musthafa. Fax: (484) 280 0020. E-mail: musthafacpdr@gmail.com
Received February 16, 2006. Accepted May 6, 2006

Gastric pneumatosis and portal venous gas in superior mesenteric artery syndrome
Yuichiro Sakamoto, Kunihiro Mashiko, Hisashi Matsumoto, Yoshiaki Hara, Noriyoshi Kutsukata, Yasuhiro Yamamoto*
Department of Emergency and Critical Care Medicine, Chiba-Hokusoh Hospital, Nippon Medical School and *Department of Emergency Medicine, Nippon Medical School, Japan

Superior mesenteric artery (SMA) syndrome is a condition where compression of the duodenum between the root of the SMA and the aorta results in intermittent obstruction of the third part of duodenum. Portal venous gas associated with nonischemic bowel is uncommon. We report an 81-year-old man who developed gastric pneumatosis and hepatoportal venous gas due to SMA syndrome, which healed without any sequelae. [Indian J Gastroenterol 2006;25:265-266]

Superior mesenteric artery (SMA) syndrome is caused by compression of the third portion of the duodenum between the SMA and the abdominal aorta. Previous reports have described the association of this condition with multiple trauma, burns, prolonged recumbency, rapid weight loss, and surgical correction of kyphosis. Portal venous gas is a rare condition.