Superior Mesenteric Artery Syndrome

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A 29-year-old woman presented with postprandial nausea, a weight loss of 5 kg in 6 months and vomiting for the previous 10 years. At the age of 24 years old, she was first suspected to have anorexia nervosa. Medication was given with little or no improvement in clinical symptoms. At the age of 27 years old, she visited another medical facility. Upper gastrointestinal examination (Fig. 1) revealed a dilated proximal duodenum with an abrupt vertical cutoff of barium flow in the third portion of the duodenum, establishing the diagnosis of superior mesenteric artery (SMA) syndrome. She did not respond adequately to conservative therapy and was referred to our hospital for further examination. Ultrasound examination revealed that the angle of the abdominal aorta and SMA was 15 degrees (Fig. 2). Computed tomography showed no malignancies and no deformities of the spine. Hypotonic duodenography also showed the typical findings of SMA syndrome similar to the upper gastrointestinal examination. Anorexia nervosa was ruled out by laboratory examination. She underwent a duodenojejunostomy, which typically improved clinical symptoms.
Figure 3. Hypotonic duodenography showed a dilated proximal duodenum with an abrupt vertical cutoff of barium flow in the third portion of the duodenum.