A rare cause of afferent loop syndrome

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experimentation was conducted in conformity with ethical and humane principles of research.
A 47-year-old female underwent robotic pancreatoduodenectomy for the pancreatic head cancer. During surgery, the jejunum (the afferent limb) was brought up though the Treitz ligament route to perform the pancreaticojejunostomy and hepaticojejunostomy anastomoses, followed by the antecolic gastrojejunostomy. The patient presented with acute abdominal pain three months after surgery. Laboratory found the elevated hepatopancreato-biliary enzymes: Total bilirubin, 2.0 mg/dL; aspartate aminotransferase, 650 U/L; alanine aminotransferase, 406 U/L; and amylase 178 U/L. Computed tomography showed the swollen afferent loop (Figure A). Double-balloon enteroscopy was performed for the treatment, and revealed the closed loop due to the afferent limb volvulus (Figure B; Figure C), which was successfully repositioned with the endoscopic intervention (Figure D). The patient was followed up without recurrence of the afferent loop syndrome for a few months.

Afferent loop syndrome due to the afferent limb volvulus is a rare complication following gastrectomy with a Billroth II or Roux-en-Y reconstruction. To the best our knowledge, this is the first report to demonstrate afferent loop syndrome by the afferent limb volvulus after robotic pancreatoduodenectomy. Diagnostic and therapeutic endoscopic intervention can be the first option. Next, surgical intervention should be considered in complicated cases refractory to the endoscopic intervention.