

Meeting abstract

Mesenteric infarction

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Aim

Mesenteric infarction is a necrosis of the intestinal wall due to a sudden reduction of the blood supply.

The different aspects of intestinal ischemia will be reviewed after the presentation of three emblematic cases led to our attention.

Materials and methods

A 70 years old man was admitted to our department for the onset of epigastric pain. The CT scan showed a thrombosis of the superior and inferior mesenteric veins and of the right branch of the portal vein with some branches for the segments VIII, VII, IV, and VI also involved.

The patient started anticoagulant therapy with intravenous sodic heparin and then switched to oral anticoagulants. Further investigations proved a heterozygosis G20210A for mutated prothrombin.

We report the case of a 63 years-old woman, with tracheostomy, gastrostomy and ciecostomy after a long recovery in intensive care unit. She was admitted for the onset of diffuse abdominal pain, with nausea, emesis and stipsis (despite of the ciecostomy). The clinical conditions worsened and she underwent laparotomic exploration in emergency. The occlusion was due to a volvulus of the small bowel and the necrosis was extended from the III jejunal loop to the last ileal loop. A latero-lateral ileo-transversostomy was then performed.

A 56 years-old man with a story of hypertension, chronic renal failure and consequent dialysis and parathyroidectomy

for secondary hyperparathyroidism was admitted in our Department for the onset of recurrent diffuse abdominal pain during the dialytic treatment, displaying intestinal subocclusive crisis. The abdominal x-ray film showed severe calcifications of the aortic and visceral vessels walls. The color-Doppler of the digestive arteries showed a severe stenosis of the origin of the superior mesenteric artery (VPS 360 cm/sec). A transfemoral stenting of the stenosis of the superior mesenteric artery was then performed successfully.

Results

Without radiologic or clinical evidence of transmural infarction of the bowel, the therapy for venous intestinal ischemia is conservative and based on anticoagulant medical therapy and this pathology arises frequently in a setting of unknown thrombophilia. We believe surgical thrombectomy must be considered only in case of infarction. The possibility of percutaneous treatment of mesenteric venous thrombosis is reported, through mechanic thrombectomy procedures or pharmacological fibrinolysis.

Intestinal ischemia can be caused by mechanical obstruction of the mesentery as for a volvulus. Surgical intervention is mandatory and wide resections are frequent.

The third case shows an acute and reversible mesenteric syndrome, presumably due to a theft syndrome with the onset of abdominal pain during dialysis, solved with a minimally invasive procedure instead of surgical revascularization. This procedure on such patients is even harder for the extent of the abdominal arterial calcifications.

Conclusion

The variable etiology of the intestinal ischaemia is well related to the different therapeutic approaches (medical, surgical or endovascular). The situation of the intestinal walls can range from a suffering intestinal loop that requires revascularization to a definitive necrotic tract of bowel for which a resection becomes mandatory. Endovascular techniques seem to provide an efficient alternative to traditional surgery, especially for chronic or acute mesenteric ischemia when there is no evidence of infarction or necrosis.

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