Aorto-hepatic by-pass grafting as a treatment option after acute thrombosis of a celiac trunk stenting

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Introduction:
✓ Thrombosis of the celiac trunk → rare after percutaneous stenting
✓ High mortality +++
✓ Treatment options: surgery / endovascular

Case report:
✓ Female patient / 56 years old / diabetic
✓ Recurrent chronic mesenteric ischemia due to a severe stenosis of the origin of the celiac trunk (no significant lesions in the two other digestive trunks)
→ Stenting of the lesion of the celiac trunk by a double brachial and femoral percutaneous approach (stent of 6*29 mm)
✓ Satisfaisant final angiography (figure 1)

CT scan: thrombosis of the stent + beginning of radiological signs of intestinal distress (figure 2)

Anterograde aorto-hepatic bypass performed urgently without bowel resection (no intestinal necrosis)

Final angiography (figure 1)

Subsequent evolution: favorable
After one year of follow-up: asymptomatic patient / CT scan → patent graft (figure 3)

Discussion:
✓ Acute mesenteric ischemia → emergency +++
✓ High mortality rates (40–70%)
✓ Etiologies: obstructive embolism or thrombosis of SMA +++ / rarely celiac trunk occlusion

Diagnosis → CT scan (complete cartography of digestive arteries in order to consider revascularization options)

Management of celiac trunk stent thrombosis: well treated in litterature but what about association to acute mesenteric ischemia?

Initial management for acute mesenteric ischemia: hemodynamic monitoring and support / correction of electrolyte imbalances / broad spectrum antibiotics / anticoagulation

Treatment options → level of occlusion, collateral vasculature, clinical state of the patient

Traditional surgery +++ → the best option for patients with intestinal infarction and signs of acute peritoneal irritation

Endovascular interventions → patients without signs of intestinal infarction (low rates of complication compared to traditional surgical mesenteric by pass)

Early diagnosis and intervention +++ required to prevent irreversible intestinal ischemia, bowel necrosis and patient death

Conclusion:
✓ Acute thrombosis of a celiac trunk stenting → emergency +++
✓ Diagnosis must be performed before the development of end-organ damage
✓ Surgical option with an aorto-hepatic by pass can be a good alternative