

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)

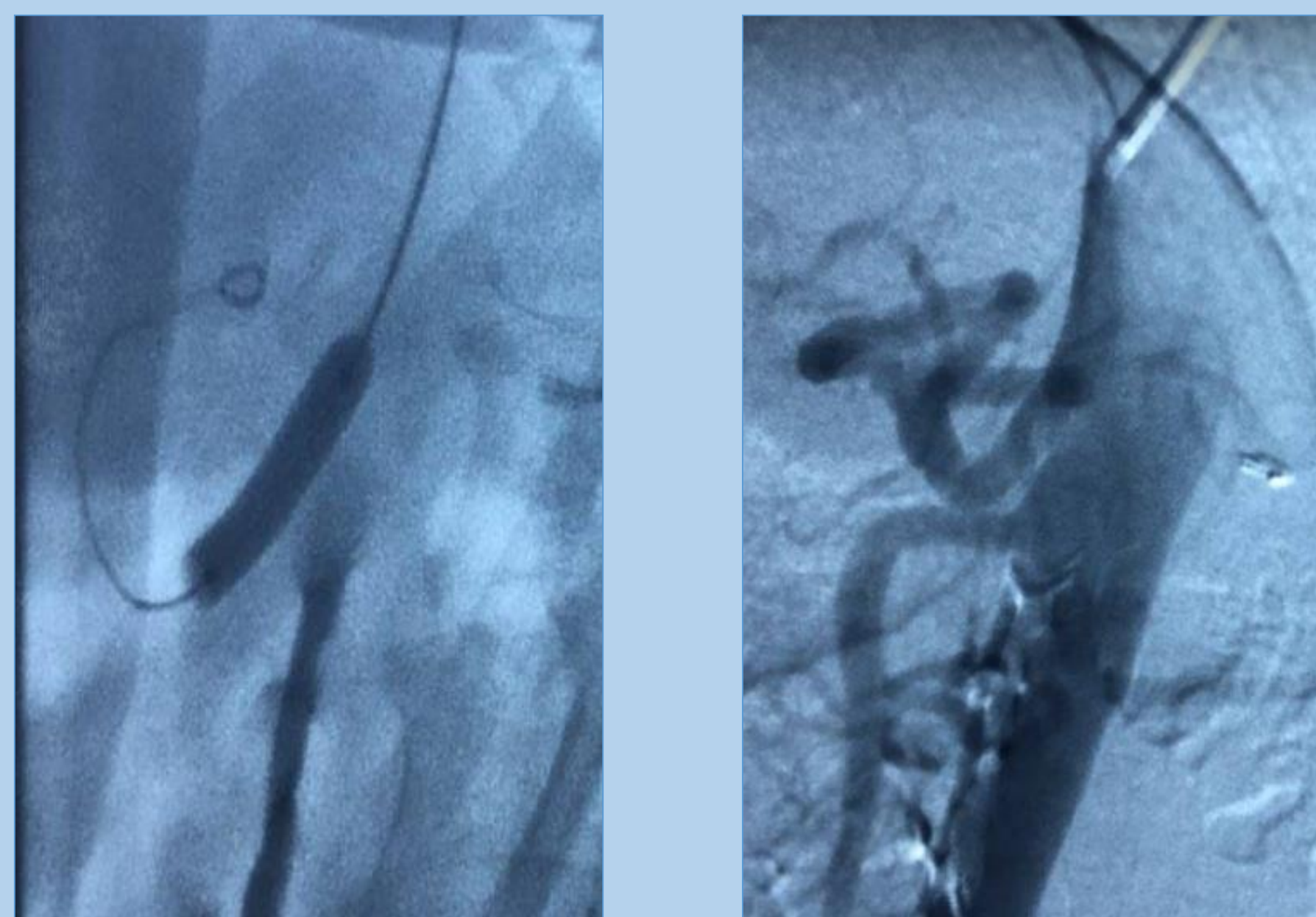


Figure 1 : Stenting of the celiac trunk and final angiography

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

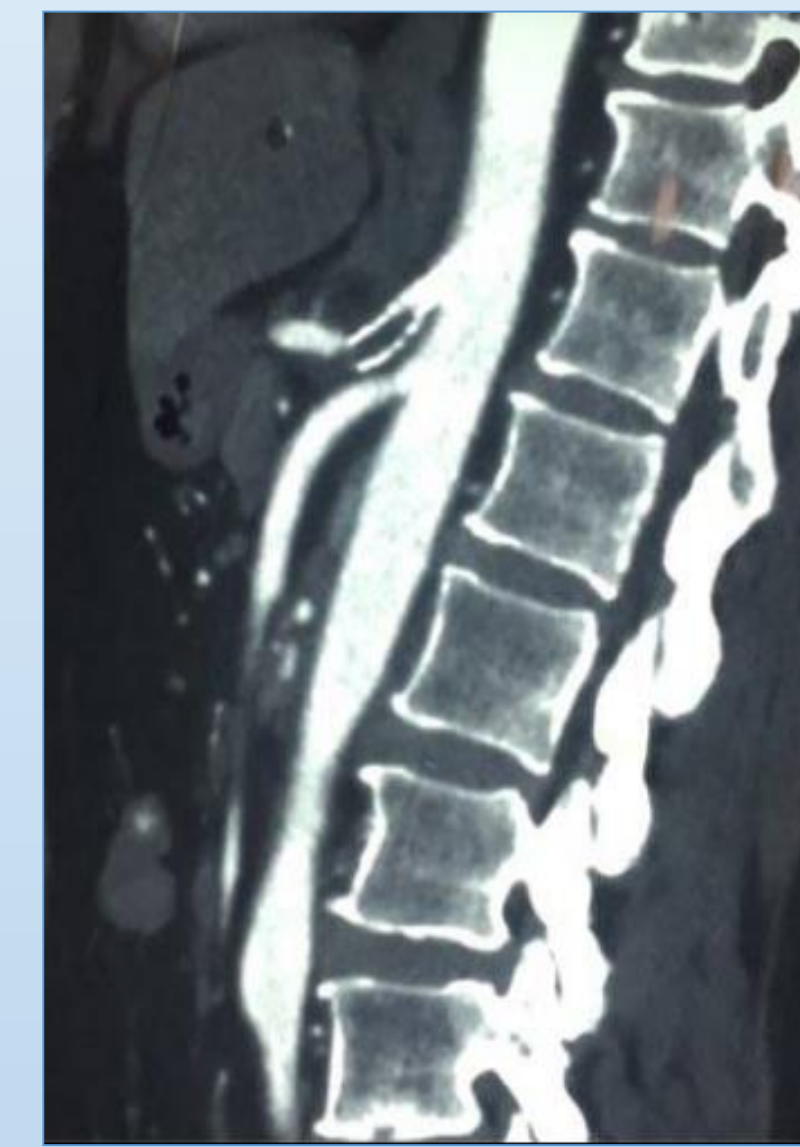


Figure 2 : CT scan showing thrombosis of the stent

- Anterograde aorto-hepatic bypass performed urgently without bowel resection (no intestinal necrosis)
- Subsequent evolution : favorable
- After one year of follow-up : asymptomatic patient / CT scan → patent graft (figure 3)



Figure 3 : Patency of the aorto-hepatic by pass

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
- ✓ Traditionnal 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 traditionnal 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

- ✓ Postoperative course : abdominal pain / diarrhea one day after stenting
- ✓ Physical examination : generalized abdominal defense → acute mesenteric ischemia ?