Endoscopic management of obstructive pancreatitis with a metal stent in two family members with hereditary cationic trypsinogen (PRSS1) deficiency

We report here the case of a 37-year-old woman and her daughter (now 12 years old) with genetically proven hereditary cationic trypsinogen (PRSS1) deficiency pancreatitis. The two patients were treated in a similar manner: endoscopic extraction of large obstructive stones located mainly in the head of the pancreas upstream of a stricture of the distal (cephalic) pancreatic duct and associated with extreme dilation (10–15 mm) of the pancreatic duct, manifesting as bouts of mild acute pancreatitis and abdominal pain that could not relieved with analgesics (Fig. 1–3).

Both patients underwent pancreatic sphincterotomy, hydrostatic dilation of the pancreatic duct stricture with a 6-mm Hurricane RX Biliary Dilation Balloon (Boston Scientific, Natick, Massachusetts, USA), removal of the stone fragments with a Dormia basket, and placement of an 8-mm-diameter, 60-mm-long fully covered self-expandable metal stent (SEMS) (WallFlex Biliary RX Stent; Boston Scientific, Natick, Massachusetts, USA), removal of the stone fragments followed by placement of a 10-Fr plastic stent (Johlin Stent; Cook Medical, Winston-Salem, North Carolina, USA), which was withdrawn 3 months later. Since this procedure, the daughter has remained asymptomatic and has resumed school attendance uneventfully. Optimal stenting modalities have not been detailed in the rare reports devoted to patients with this condition [1–5]. The use of fully covered SEMS was of particular interest in these two patients, who presented with similar findings (short distal stricture and unusually large upstream dilation), because these stents can facilitate the removal of large stones and reduce the discrepancy between duct size in the head and body of the pancreas, a major factor in stone formation.

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Marine Camus1,2, Sarah Leblanc1, Dominique Debray2,3, Ulrikka Chaput4, Stanislas Chaussade1,2, Frédéric Prat1,2

1 Department of Gastroenterology, Lariboisière Hospital, APHP, Paris, France
2 Faculté Paris Descartes, Paris, France
3 Pediatric Hepatology, Necker Hospital, APHP, Paris, France
4 Department of Hepatogastroenterology, Lariboisière Hospital, APHP, Paris, France

References

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**Fig. 2** (the daughter): a, b stones in the dilated pancreatic duct; c after treatment, stones in the pancreatic parenchyma (whereas the main pancreatic duct is free of stones); d the pancreatic duct after treatment, exhibiting a moderately enlarged caliber.

**Fig. 3** Endoscopic ultrasound views of the patient in Fig. 2: a, b stones in the dilated pancreatic duct; c after treatment, stones in the pancreatic parenchyma (whereas the main pancreatic duct is free of stones); d the pancreatic duct after treatment, exhibiting a moderately enlarged caliber.

**Fig. 4** Fully covered self-expandable metal stent in the pancreatic duct.

**Fig. 5** Duodenoscopic view of the removal of stone fragments with the Dormia basket.

**Bibliography**
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**Corresponding author**

Marine Camus, MD
Department of Gastroenterology
Cochin Hospital
27 rue du Faubourg Saint-Jacques
75014 Paris
France
Fax: +33-1-58-41-19-65
marine.camus@cch.aphp.fr