Late-occurring coil migration into the duodenum

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DESCRIPTION

A 74-year-old man presented with hypovolemic shock due to acute arterial haemorrhage from his abdominal drainage tube, which was placed at the choledochojejunostomy, at 12 days following surgical resection of bile duct carcinoma. Postoperative abscess formation was noticed at the same region, and urgent parent artery embolisation using 0.018-inch fibred platinum microcoils was performed from the distal to proximal ends of the pseudoaneurysm arising from the gastroduodenal artery (figure 1). The follow-up plain radiograph performed 2 years after the procedure showed that the

coils were stabilised in the same position. At 3 years after coil embolisation, the plain radiograph showed a coil deformity without symptoms (figure 2). Five years after the procedure, the coil mass had become loose and elongated (figure 3). Coil migration into the duodenum with mucosal granulation was endoscopically confirmed (figure 4). However, angiography still showed occlusion of the gastroduodenal artery and the patient was asymptomatic.

To prevent recanalisation of the pseudoaneurysm, embolic material should occlude not only the pseudoaneurysm, but also the parent artery. Nonetheless, as pseudoaneurysms lack true arterial walls, coil

Figure 1 A plain radiograph revealed multiple microcoils in a successfully occluded gastroduodenal artery pseudoaneurysm at the end stage of embolisation.

Figure 3 3 Follow-up plain radiograph revealed coil migration at 5 years after coil embolisation (arrow).

Figure 2 Follow-up plain radiograph revealed coil migration at 5 years after coil embolisation (arrow).

Figure 4 Endoscopy revealed migration of the embolised coil into the duodenum.

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migration should be considered as a possible complication during endovascular management.

Late-occurring coil migration is very rare, particularly migration into the gastrointestinal tract.^{1 2} We speculate that coil migration into the duodenum through the tract from an adhesive inflammatory pseudoaneurysm was associated with enteric peristalsis. The long-term stability of coil embolisation for pseudoaneurysms is associated with uncertainties. A long-term follow-up should be requested so that late-stage coil deformities and migration can be detected.

Learning points

- ▶ Late-occurring coil migration is a very rare but potential complication of coil embolisation.
- ▶ Long-term follow-up with plain radiographs is essential for immediate detection of late-stage complications, such as coil migration.

Competing interests None.

Patient consent Obtained.

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