

After meniscal repair, gingival artery embolization is performed to treat recurrent hemarthrosis.

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ABSTRACT

Standard procedure for biliary obstruction is to implant a stent via endoscopic retrograde cholangiopancreatography (ERCP). An indwelling stent can have a number of problems, however stent breakage is uncommon. Here, we describe a case of a plastic biliary stent fracture that happened during the insertion of a percutaneous biliary drain (PBD), as well as its successful endoscopic removal. In patients who already have an indwelling biliary stent, stent fracture should be taken into account as a potential side effect of PBD installation.

Keywords:

Biliary stent fracture, Complication, Percutaneous biliary drain

INTRODUCTION

An established approach for treating both benign and malignant biliary system blockages is endoscopic retrograde cholangiography with biliary stent insertion. This process isn't without risk, hazards, as well as certain problems, have already been covered in the literature.[1] Stent obstruction caused by tumour ingrowth or even viscus perforation can manifest as a late consequence in contrast to bleeding, discomfort, pancreatitis, infection, and stent migration that frequently show sooner. Stent fracture, which has been previously described in both plastic and metal biliary stents, is a less frequently reported consequence. Given the possibility of subsequent biliary blockage and cholangitis, stent fracture is a serious problem that needs to be handled very away. [4-10] Despite the fact that stent fracture is a very uncommon event, it is probably underreported due to difficulties in identification, particularly in self-expanding metal stents (SEMSs). [9]

Similar to this, there is a lack of information in the current literature about how to remove broken biliary stents. [4,5] Here, we present an endoscopic procedure that was used to successfully remove a plastic biliary stent fragment that broke during the replacement of a percutaneous biliary drain (PBD).

DISCUSSION

Both benign and malignant biliary tract blockages can be treated with ERCP and biliary stenting. While there have been many documented biliary stenting complications, but there have only been a few reports of stent fractures, and there has only ever been one incidence of a plastic stent fracture before[4-10]. There are currently no studies comparing the risk of stent fracture between plastic and metal stents. Metal stents typically have a lower risk of stent rupture. plastic stents are less expensive but require replacement every three months due to the significant risk of obstruction because of their wider diameter. [1,4]

As suggested by others, the overall incidence of stent fracture may be underreported because of a lack of awareness and the challenge of identification, particularly in SEMS. [9] It is believed that polyurethane cover deterioration or metal fatigue are the secondary causes of stent fractures in SEMS. [6] Plastic biliary stent breakage as a result of manipulation during PBD exchange has not before been reported. not been reported, but it should be taken into account as a potential issue. After a retrieval balloon could not be advanced past the proximal stent piece, we describe removal with a 4 mm dilating balloon sweep. Using rat-tooth forceps, Alkhiari et al. demonstrated an endoscopic method for removing a self-expandable metal stent. [5] A solely endoscopic approach, however, might not always be practical. According to Dumonceau et al., despite repeated attempts, it was not possible to endoscopically remove the distal portion of a 10 French plastic biliary stent, so the fragment had to be left in place. [4]

CONCLUSION

We believe that this research will raise people's awareness of the possibility of fracture during PBD implantation and exchange in patients who already have biliary stents. In order to reduce this issue in the future, additional research may concentrate on elements like stent material, size, and placement that are most likely to be linked with stent fracture. In the event that a stent fractures, we also anticipate that the endoscopic method described in this article may serve as a roadmap for future attempts to retrieve stent pieces from patients with severe biliary duct stricturing.

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