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Migrated CBD stent presenting as chronic discharging sinus – A rare sequela of an Endoscopic stenting

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Abstract: Endoscopic billiary stenting is an accustomed modus operandi to deal with benign billiary diseases. Though short term complication has been mentioned in medical literature, there are very few case reports on forgotten CBD stents. We present a case of 50 year old male who presented with a discharging sinus in rt hypochondrium. Patient gave history of some endoscopic procedure 9 years ago. Radiological imaging revealed a DPT stent in right lobe of liver which was having its one end in subcutaneous space in right hypochondrium. Exploratory laparotomy was done and the stent retrieved. Migration of CBD stent in gastrointestinal tract is a frequent finding but migration to subcutaneous space through liver is scarcely reported.
Keywords: Proximal CBD stent migration, complication of CBD stent, billiary-cutaneous fistula

INTRODUCTION

Endoscopic billiary stenting is an accepted procedure to deal with various pathologies of billiary tree. Although it is quite a rewarding procedure and is successful in relieving obstruction in most of the cases, but it is also accompanied by few complications. Cholangitis, Pancreatitis, duodenal perforations, hemorrhage are short term complications [1, 2, 3, 4], while stent occlusion, distal stent migration and intestinal obstruction are long term complications [5, 6]. Some authors have reported formation of stones over CBD stent [7, 8, 9]. But proximal migration of CBD stent through liver to skin had not been reported. We present a case of forgotten CBD stent which migrated proximally and presented as billiary cutaneous fistula.

CASE REPORT

A 50 year old male reported to us in our outpatient department with a history of a discharging sinus in right hypochondrium for 3 months. Earlier there was a small swelling for 5-7 days which was followed by spontaneous formation of a wound. The amount of discharge was 50-100 ml daily and was golden brown in colour. Patient gave the history of an unknown endoscopic procedure for pain abdomen, 9 years back.

On examination there was a small discharging sinus in right hypochondrium with surrounding in duration. Abdominal examination was insignificant. Also, there was no jaundice. An abdominal C.E.C.T was done which showed a radio-opaque linear foreign body in right lobe of liver extending to subcutaneous space. Sinus fluid analysis showed high level of bile acids. On exploration, a DPT stent was seen extending from the sinus to right lobe of liver. The stent was removed with the sinus tract. Post-op period was uneventful and the patient was discharged on day 4.

Fig-1: CBD stent can be seen protruding out of Sinus tract

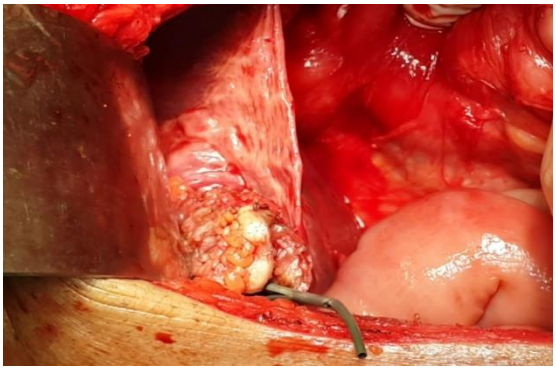
Fig-2: Dissected sinus tract with stent seen out of abdominal incision

Fig-3: Stent can be traced up to right lobe of liver

DISCUSSION

Gall Bladder and Billiary tree has fascinated the surgeons from all over the worlds since ages. But this domain of surgeons was trespassed in 1979 by Soehendra and Reynders-Frederix [10], when they introduced transpapillary stent placement to relieve obstruction of bile ducts.

Most of the authors have regarded this procedure extremely safe and with nearly 100% success rate [11]. Cholangitis and occlusion of stent are the most common complications reported [3, 4]. Pancreatitis, bleeding, duodenal perforation, stent fracture are too mentioned in the literature, but with low incidence [3, 4, 12].

Stent migration seems to be a long term complication which has many times produced a diagnostic dilemma. The distal migration of stent (7.5%) is more common than the proximal migration (5.2%) [13]. It has been seen that the migration of stent is more common in benign rather than malignant pathologies. Moreover proximal migration is more common in malignant diseases while distal migration is common in benign diseases [14, 15]. This can be explained from the fact that relieving a billiary obstruction in a benign disease results in decrease of inflammation and thus increase in diameter of CBD, thus causing distal migration while in malignant pathology; there is always an increase in distal diameter tof bile duct causing proximal migration.

Most of the distally migrated stents passes out safely, though some may lodge in intestine and may lead to obstruction, perforation or enterocutaneous fistula. Proximally migrated stents are nearly always lodged in the billiary tree and thus demands endoscopic or surgical intervention. Stents retained for very long times act as a foreign body and the host body initiates a fibrinous response thus forming a capsule around it. Such foreign bodies have been reported to erode gastrointestinal tract and passed out silently or have eroded the surrounding tissue to present on abdominal wall [16]. This is the nature`s way of getting rid of the foreign body. While most of the migrated stent can be retrieved endoscopic methods, those who have eliminated can be dealt with surgical interventions only.

CONCLUSION

In the end, it can be inferred without any doubt that endoscopic stenting plays a big role in management of billiary pathologies. Stent migration is a long term complication which should be kept in mind while dealing with abdominal complains in any patient who has undergone endoscopic stenting in the past.

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