LETTERS

Management of bile duct injuries
– experience in a referral unit

Bile duct injuries and their sequelae present a formidable challenge, with varying management protocols as well as long-term results. Contemporary rates of bile duct injuries range from 0.1% to 0.2% in open cholecystectomy and up to 0.5% in laparoscopic cholecystectomy.

Records of 18 patients with bile duct injuries treated in a single referral unit over a 4-year period were analyzed. All 18 cases were following open (n=11) or laparoscopic (7) cholecystectomy. The clinical presentation, level of injury and treatment options are shown in the Table. The diagnostic modalities used included liver biochemistry, ultrasonography and biliary scintigraphy. Cholangiography (endoscopic or percutaneous) was done depending on the presence or absence of tracer in the duodenum after scintigraphy. Cases with biloma were subjected to sonography-guided drainage of the collection and percutaneous transhepatic biliary drainage for proximal diversion, following which a waiting period of 4 to 6 weeks was allowed before definitive treatment. This interval was used to control sepsis and to build the nutritional status of the patient.

Postoperative morbidity was due to wound infection (4 patients), anastomotic leak (2), and cholangitis, hematemesis and pancreatitis (1 each); all were treated conservatively. There was no mortality in our series.

Following treatment, 16 patients remained asymptomatic and with normal biochemical parameters while 2 required repeat intervention for anastomotic stenosis and recurrent attacks of cholangitis. One patient, in whom a bilio-biliary anastomosis had been done, was stented endoscopically as he had portal hypertension with cirrhosis of liver. The second patient, who had undergone choledochoduodenostomy, developed an anastomotic stenosis at 7 months and was subjected to endoscopic balloon dilatation. This patient is being followed up regularly with the option of a second surgery. All 18 patients are on regular follow-up, with median follow-up being 18 (range 12-40) months.

The management of bile duct injuries requires team effort between an endoscopist, a radiologist and an experienced surgeon. Endoscopic retrograde cholangiography is the most useful tool for the definitive diagnosis of major bile duct complications. Studies have shown that for localized leaks in the early postoperative period, endoscopic stenting is the best option.3 Percutaneous transhepatic cholangiography has great value in transaction injuries for identifying the proximal extent of injury. For cases with jaundice due to a cicatrical stricture, magnetic resonance cholangiography would be an ideal investigation.

Restorative surgery like end-to-end bilo-biliary anastomosis has limited scope due to the inevitable stenosis formation. Reconstructive surgery like hepaticojejunostomy is the most efficacious option.4 We performed a high hepaticojejunostomy to the dilated, unscarred, well-vascularized and minimally dissected duct using a single layer of interrupted sutures (4-0 PDS) with a paratching technique for the posterior layer. Choledochoduodenostomy is possible only for low-level common bile duct injuries. Even this is debatable in a bile duct that has been transected because very little blood supply comes from above (38%, as compared to 62% from below).5 This makes it necessary to do a high anastomosis and avoid ischemic stricture.

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References

Table: Clinical presentation, level of bile duct injury and therapy

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<tr>
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Characteristics of gastric malignancy in eastern India

Information regarding characteristics of gastric malignancy, its demographic pattern, histological type, anatomical locations and various etiological associations, as observed in eastern India, are scanty in the literature. This paper is based on the study of the above features in consecutive cases of gastric malignancy undergoing endoscopy at a cancer center in Calcutta during the period March 1998 to March 2000.

Gastric malignancy was diagnosed on the basis of histological examination of endoscopic biopsy in 110 cases. Demographic characteristics, clinical presentation, and anatomical location of the malignancy were recorded in all cases. The histological types were classified according to the WHO classification.1 The rapid urease test for Helicobacter pylori was carried out using a standard commercial kit2 on 71 patients with adenocarcinoma and 3 with gastric lymphoma. Dietetic history and history of addiction could be obtained during the time of examination from 66 patients with adenocarcinoma.

Of the 110 patients, 105 (95.4%) were diagnosed to have adenocarcinoma, 2 (1.9%) squamous cell carcinoma and 3 (2.7%) non-Hodgkin’s lymphoma (NHL). More than two-thirds (78.1%) of cases with adenocarcinoma were men, and 23.8% occurred in a younger age group (21–40 years). Dyspeptic symptoms were present in only 31% of cases. In a majority of cases, the tumor was situated in the antrum (60; 57.1%) or body (12; 11.4%) of the stomach. Carcinoma arising from gastrojejunostomy stoma was found in 5 (4.7%) cases, who had earlier undergone surgery for duodenal ulcer. Poorly differentiated histological type was found in the largest (41.9%) number of cases, whereas only 11.4% belonged to the well-differentiated type. The rapid urease test was positive in 25 (35.2%) patients with adenocarcinoma and one of three with NHL. History of intake of excess salt in the diet (as compared to other family members) was found in 75.7%, while that of consuming patta and betel nut and tobacco chewing was found in less number of cases (33.3% and 27.2%, respectively).

A predominantly male population suffers from gastric adenocarcinoma in eastern India, the lesion occurring in the distal part of the stomach in most cases. Similar findings are available from reports from southern India.4,5 A large number of such patients are young and give history of intake of excess salt in the diet and smoking. However, the rapid urease test for H. pylori infection was found to be infrequently positive in our cases; higher rates (38%–56%) have been reported from other centers in India.4,6,7

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Brown Kelly-Paterson syndrome and other eponymous misnomers

I wish to point out a small error in the report on Paterson-Kelly syndrome.1 The appropriate term for this syndrome is Brown Kelly-Paterson (or Paterson-Brown Kelly), named after Drs Adam Brown Kelly and Donald Paterson.2

However, the authors are correct in opting for this eponym rather than the other equally well-known one, Plummer-Vinson syndrome. The paper Vinson wrote was on dysphagia with resulting anemia, considered to be due to hysteria, but with no mention of glossitis. Vinson refers to similar cases having been documented by Plummer, but with no specific reference. In fact, there is no paper in the literature on this subject by Plummer. Perhaps he presented his findings in a lecture or a meeting.