Concise Commentary: A Stitch in Time—Prophylactic Cholecystectomy Can Reduce Readmission After ERCP

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Thirty-day readmission rates have been increasingly used as an outcome measure and quality benchmark in health services research. While there are known complications associated with ERCP, there are limited data on readmission rates following ERCP.

In this issue of *Digestive Diseases and Sciences*, Krill et al. [1] published a single-institution retrospective chart review whose objective was to identify predictors of 30 day readmission after inpatient ERCP. Of a total of 497 inpatient ERCPs performed over a 46-month period, 52 (10.5%) were readmitted within 30 days after hospital discharge. Although basic demographic characteristics were similar between those readmitted vs those not, comorbidities were significantly higher in those readmitted. By multivariate analysis, cirrhosis or a history of prior liver transplantation significantly increased the odds for readmission. Placement of a pancreatic duct stent was also associated with increased odds of readmission, though this association is limited to patients with acute or chronic pancreatitis undergoing ERCP for pancreatic endotherapy since twenty percent of those patients were readmitted. In patients who had an ERCP and pancreatic stent placement for a biliary indication, the association with readmission was no longer present. In a subgroup analysis for patients having ERCP for biliary indications, early ERCP (within 3 days of admission) and cholecystectomy prior to discharge were associated with decreased need for readmission.

The 30-day readmission metric as a quality indicator is of limited utility, as only a small proportion of readmissions are likely to be preventable [2]. For instance, in this study, more than half of the readmissions were unrelated to pancreaticobiliary indications and were presumably not directly related to the prior ERCP. Nevertheless, for readmissions

that were for pancreaticobiliary-related conditions, almost half (11/25) were related to gallbladder or biliary stones that may have been prevented if a cholecystectomy had been performed prior to discharge. As such, the authors conclude that appropriate surgical management, including performing a cholecystectomy prior to discharge where indicated, should be accomplished, in keeping with previous studies supporting cholecystectomy during the index admission rather than after discharge in order to diminish readmission rates for pancreaticobiliary complications [3, 4]. Chronic pancreatitis is associated with frequent readmissions with as many as one in four patients readmitted within 30 days [5] which likely accounts in part for the increased odds of readmission in this study for the subgroup of patients that had a pancreatic stent placed for pancreatic endotherapy. Similarly, liver transplant patients and cirrhotics have high readmission rates due to underlying disease regardless of whether they have had an ERCP [6].

The majority of readmissions in patients who have had an inpatient ERCP may not be preventable as they are either unrelated to pancreaticobiliary complications or are associated with underlying conditions with known high readmission rates such as chronic liver disease or pancreatitis.

Nonetheless, patients with complications of biliary stones such as cholangitis or biliary pancreatitis who have an intact gallbladder should undergo early ERCP during the index admission followed by cholecystectomy prior to discharge if clinically appropriate.

Compliance with Ethical Standards

Conflict of interest Consultant Boston Scientific.

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