INCREASED CHOLECYSTECTOMY RATES AMONG MEDICARE PATIENTS AFTER THE INTRODUCTION OF LAPAROSCOPIC CHOLECYSTECTOMY

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ABSTRACT: A study was undertaken of Medicare claims coded for cholecystectomy and those coded for laparoscopic cholecystectomy for the four year period 1990-1993 in New York State. During this time period there was a 28.12% increase in total cholecystectomies performed and an increase in the proportion of laparoscopic cholecystectomies from 15.86% to 50.0%. The increase in total cholecystectomies appears to be driven by a dramatic increase in laparoscopic procedures. Possible reasons for this increase include the performance of laparoscopy on patients previously assessed as too risky to undergo the conventional procedure, laparoscopy on mildly symptomatic patients who had previously put off a perceived higher risk open procedure and a possible broadening of indications for gallbladder surgery.

The dramatic increase in the numbers of cholecystectomies performed in the early 1990s may be due in part to procedures performed on a large pool of procrastinating mildly symptomatic patients. If this is the case, then these increased rates should decline to baseline levels as soon as this pool of patients is exhausted. However, if surgeons are performing laparoscopy on asymptomatic patients with gallstones, then these rates may well be sustained. Such a broadening of indications for gallbladder surgery is of concern to many and has prompted the issuance of guidelines concerning the treatment of gallstones. Any broadening of indications for gallbladder surgery also has significant implications for health care costs and the use of health care resources.
INTRODUCTION

Laparoscopic cholecystectomy was first introduced in the late 1980s. Since then it has rapidly replaced the conventional open procedure. The adoption of this technique has been driven by both economic forces and patient preference. The latter is based on a shorter hospital stay, less pain, rapid recovery, a better post-operative cosmetic result, and the perception that it is less invasive and carries a lower risk than the conventional procedure. Public demand forced many surgeons to learn the procedure and hospitals to acquire the equipment to remain competitive. Aware of the large potential market, laparoscopic equipment manufacturers actively promoted the procedure and helped surgeons to adopt it by offering easily accessible training courses.

A number of early studies showed low complication rates comparing favorably with the 6% rate and less currently found with open cholecystectomy. However, these results, obtained early on in the adoption of this new technology, must be viewed with caution. Many were obtained by experienced laparoscopists working in large medical centers where careful patient selection played a role in reducing the severity and frequency of complications.

In a retrospective analysis of 1,520 Medicare patients who had their gallbladders removed through laparoscopy between January 1, 1990 and June 30, 1991, we documented complications in 15.8%. In a hospital based case review study of 2,940 Medicare and 1,108 Medicaid patients who had the procedure in 1991, hospitals in New York State reported complications in 11.9% and 9.7% respectively.

The Medicare complication rates found in our studies reflect in part age-related co-morbidities which led to increased risks of complications. However, they also reflect increased complication risks associated with the early part of the surgical learning curve.

As laparoscopic cholecystectomy was rapidly adopted by surgeons, it became apparent that not only was there a shift from the conventional open procedure to laparoscopy, but also an increase in the volume of the latter. While the reasons for this remain somewhat speculative, they include the following: the performance of laparoscopy on patients previously considered too risky to undergo conventional open cholecystectomy; surgery on mildly symptomatic patients who procrastinated a conventional procedure in the past; and a broadening of the indications for gallbladder surgery. Concern over the latter recently prompted the American College of Physicians to issue clinical guidelines for internists concerning the treatment of gallstones.