

---

# Operative Strategies in Laparoscopic Cholecystectomy: Is There Any Evidence?

# 2

Fabio Cesare Campanile, Ferdinando Agresta, Nereo Vettoretto, Roberto Cirocchi, and Mario Campli

---

## 2.1 Introduction

The laparoscopic revolution in general surgery began between 1985 and 1987, when laparoscopic cholecystectomy was introduced. The development of the technique to perform a cholecystectomy by laparoscopy was the beginning of a radical change that, in a few years, involved general surgeons all over the world. The enormous interest enjoyed by the laparoscopic cholecystectomy spread shortly in all other sectors of general surgery.

During the following years, many surgeons, throughout the world, learned how to perform a laparoscopic cholecystectomy; most surgeons keep practicing the same technique that they had learned in the first place; the technical details they use are a

---

F.C. Campanile, MD, FACS (✉)  
Division of Surgery, Hospital S. Giovanni Decollato Andossilla, Via Ferretti 169,  
Civita Castellana, VT 01033, Italy  
e-mail: [campanile@surgical.net](mailto:campanile@surgical.net)

F. Agresta, MD  
Department of General Surgery, ULSS19 del Veneto, Via Etruschi 9,  
Adria, RO 45011, Italy  
e-mail: [fagresta@libero.it](mailto:fagresta@libero.it)

N. Vettoretto, MD  
Laparoscopic Surgical Unit, M. Mellini Hospital,  
Viale Giuseppe Mazzini 4, Chiari (BS) 25032, Italy  
e-mail: [nereovet@gmail.com](mailto:nereovet@gmail.com)

R. Cirocchi  
Department of Digestive and Liver Surgery Unit, St Maria Hospital,  
Viale Tristano di Joannuccio, Terni 05100, Italy  
e-mail: [roberto.cirocchi@unipg.it](mailto:roberto.cirocchi@unipg.it)

M. Campli  
Division of Surgery, "Nuova Itor" Private Health Facility,  
Via Manfredi 5, Rome 00197, Italy  
e-mail: [mario.campli@gmail.com](mailto:mario.campli@gmail.com)

matter of personal preference and are not systematically confronted with other propositions. The purpose of this chapter is to examine some of those technical details and find out if there is any evidence in their support.

---

## 2.2 Position of the Patient

The first laparoscopic cholecystectomy was performed in 1985 by the German surgeon Erich Mühe, who presented his experience at the Congress of the German Surgical Society (GSS) in April of 1986. However, Phillipe Mouret in Lyon has generally been given credit for developing the first laparoscopic cholecystectomy as we know it today. In 1987, he added a cholecystectomy to a planned laparoscopic gynecological adhesiolysis. Shortly thereafter, François Dubois, in Paris, and Jacques Perissat in Bordeaux began to perform laparoscopic cholecystectomies.

In 1989, Perissat attracted a great interest at the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) meeting with a video on laparoscopic cholecystectomy, and Dubois published the first series on *Annals of Surgery* in 1990.

Simultaneously to the French, the American surgeons Barry McKernan and William Saye performed the first laparoscopic cholecystectomy in the United States in 1988. Then, Nashville surgeons Eddie Reddick and Douglas Olsen began performing the operation on a regular basis, in their private practice, outside the main academic centers; they also introduced the laser technology and started the first educational program about laparoscopic general surgery. Their educational effort has to be credited for the widespread diffusion of laparoscopic cholecystectomy in the United States, where it was soon regularly adopted: the first large multi-institution clinical series was published in 1991 by the Southern Surgical Group [1]; Cappuccino et al. reported, for the Monmouth Medical Center Laparoscopic Cholecystectomy Group, the first large single institution experience in 1994 [2].

This simultaneous beginning on both sides of the Atlantic explains the coexistence of two techniques, different in several points: French and American (Figs. 2.1 and 2.2). The former approach is common in Europe (especially France and Germany), but the latter is dominant elsewhere.

The position of the patient and the surgical team differs between the two techniques: the patient's legs are divaricated with the surgeon standing between them, in the former, but closed, with the surgeon on the left side of the operating table, in the latter. In both cases, the optical port is at the umbilicus; the operating cannula (for the dissecting instruments) is in the left upper quadrant in the French technique but just below the xiphoid process in the American one. A slight reverse Trendelenburg position and left-sided rotation are enough to allow an easy access to the operating surgeon in the American position, while a steeper reverse Trendelenburg is necessary, in the French position, to bring the operating field closer to the surgeon standing at the pelvis of the patient. The displacement of the liver is trusted to a probe inserted in a cannula positioned just below the costal margin, at the midclavicular line, in the French technique, and the triangle of Calot is exposed by downward and