SINGLE-PORT LAPAROSCOPIC SURGERY
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Prof Dr Med Erich Mühe of Böblingen, Germany, performed the first laparoscopic cholecystectomy on September 12, 1985.

Dr Phillipe Mouret, has got the credit to perform the first laparoscopic cholecystectomy in Lyons, France using video technique, in Mars 1987. Cholecystectomy is the laparoscopic procedure which revolutionized the general surgery.

In May 2007, Dr Paul Curcillo became the first in the world to remove a gallbladder through a single incision in the patient’s belly button. The single port access (SPA™) surgery left only a hidden scar.
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and with Drexel University multidisciplinary surgical team, performed laparoscopic SPA:

- Laparoscopic cholecystectomy
- Gynecologic procedures
- Urologic procedures
- Left Adrenalectomies (n=2)
- Spleen surgery
- Colorectal procedures
- Hernia repair

...
Transumbilical laparoscopic cholecystectomy utilizes no incisions outside the umbilicus.

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Laparoscopic cholecystectomy has become the gold standard in the care of patients with cholelithiasis. A standard laparoscopic cholecystectomy employs three trocar incisions outside the umbilicus, which are a source of potential wound complications and an undesirable cosmetic outcome. We describe here a modification of the laparoscopic cholecystectomy which utilizes two transumbilical trocars and two transabdominal gallbladder stay sutures and does not require abdominal wall incisions outside the umbilicus. When technically feasible, this technique results in superior cosmesis and may reduce postoperative wound complications.

Goel RK, Kaouk JH.

Section of Laparoscopic and Robotic Surgery, Glickman Urological and Kidney Institute Cleveland Clinic, Cleveland, OH 44195, USA.

BACKGROUND: Cryoablation has been performed laparoscopically for small...
Methods

- TRIPORT System
- GelPort System
- Uni-X Single Port System
- AirSeal Technology
- R-Port System
- Three umbilicus trocar
SINGLE-PORT LAPAROSCOPIC SURGERY

SILS
Laparoscopic Cholecystectomy
SINGLE-PORT LAPAROSCOPIC SURGERY

MATERIALS

5-mm laparoscope

5-mm trocars

Roticulated instruments
Important Tricks

Distended gallbladder (hydrops): punction with Veress needle

One percutaneous stitch used for gallbladder suspension
SINGLE-PORT LAPAROSCOPIC SURGERY

CONVERSION

STANDARD LAPAROSCOPIC PROCEDURE
Other/s accessory port INSIDE the umbilicus
Other/s accessory port OUTSIDE the umbilicus

OPEN TECHNIQUES
ADVANTAGES IN SILS CHOLECYSTECTOMY

To Conventional Lap Chol

Cosmesis
Wound infection
Postoperative pain
Comparable cost
Any New Instruments
Any Specific Competence
Any Training

but

More operative time
More difficult

To NOTES

In NOTES

Highly specialized
Sophisticated instruments
Access to peritoneal cavity

vagina
stomach
bladder
colon
**Institut J Martí Ragué – A Sáenz**

**Experience with SILS: > July-2008**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Patients No.</th>
<th>Accessory ports 1 outside *</th>
<th>Accessory ports 2 outside *</th>
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<td>Cholecystectomy</td>
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<tr>
<td>Appendectomy</td>
<td>5</td>
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<tr>
<td>Right Adrenalectomy</td>
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*outside of the umbilicus*
SILS Cholecystectomy: Conclusions

The surgeon can perform SILS without any new instruments, specific competence, or training.

The conversion is to standard laparoscopic technique with one (or two) outside port

The percutaneous stitches used for gallbladder suspension, are NONVISIBLE SCARS but not INVISIBLE SCARS

Is time consuming and technically difficult
SINGLE-PORT LAPAROSCOPIC SURGERY

NAME OF THE PROCEDURE

SILS  Single Incision Laparoscopic Surgery
SPA  Single Port Access

TUES  Transumbilical Endoscopic Surgery
TUFES  Transumbilical Flexible Endoscopic Surgery (Cuesta MA)
NOTUS  Natural Orifice Transumbilical Surgery (Speranza J)
OPUS  One Port Umbilicus Surgery
SINGLE-PORT LAPAROSCOPIC SURGERY

The Umbilicus

for love

for center of the world

for exploration

for piercing

for tatoo

for SILS