

References

[Randomized trial of traditional dissection with electrocautery versus ultrasonic fundus-first dissection in patients undergoing laparoscopic cholecystectomy.](#)

Cengiz Y, Jänes A, Grehn A, Israelsson LA.
Br J Surg. 2005 Jul;92(7):810-3.

[Improved outcome after laparoscopic cholecystectomy with ultrasonic dissection: a randomized multicenter trial.](#)

Cengiz Y, Dalenbäck J, Edlund G, Israelsson LA, Jänes A, Möller M, Thorell A.
Surg Endosc. 2009 Aug 18.
[Epub ahead of print]

Abstract:

Br J Surg. 2005 Jul;92(7):810-3.

[Randomized trial of traditional dissection with electrocautery versus ultrasonic fundus-first dissection in patients undergoing laparoscopic cholecystectomy.](#)

[Cengiz Y](#), [Jänes A](#), [Grehn A](#),
[Israelsson LA](#).

Department of Surgery,
Sundsvalls sjukhus, Sweden.

Yucel.Cengiz@lvn.se

BACKGROUND: In laparoscopic cholecystectomy dissection can be with monopolar electrocautery or with ultrasonic shears, and can start at the triangle of Calot or at the fundus of the gallbladder. METHODS: Thirty-seven patients undergoing laparoscopic

cholecystectomy were randomized to electrocautery dissection from the triangle of Calot and 43 to fundus-first dissection with ultrasonic shears. All procedures were strictly standardized, and patients and their postoperative carers were blinded to the operation performed. RESULTS: Ultrasonic fundus-first dissection was associated with a shorter duration of operation (mean 46 versus 61 min), fewer overnight hospital stays (two versus eight), lower pain scores 4 and 24 h after surgery, less nausea at 2, 4 and 24 h, and a shorter period of sick leave (mean 5.5 versus 9.3 days) compared with electrocautery from the triangle of Calot. CONCLUSION: Ultrasonic fundus-first dissection during laparoscopic cholecystectomy was quicker and associated with less nausea and pain than electrocautery dissection from the triangle of Calot. Copyright 2005 British Journal of Surgery Society Ltd.

[Surg Endosc.](#) 2009 Aug 18.

[Epub ahead of print]

[Improved outcome after laparoscopic cholecystectomy with ultrasonic dissection: a randomized multicenter trial.](#)

[Cengiz Y](#), [Dalenbäck J](#), [Edlund G](#), [Israelsson LA](#), [Jänes A](#), [Möller M](#), [Thorell A](#).

Department of Surgery,
Sundsvall Hospital, 851 86,
Sundsvall, Sweden,
Yucel.Cengiz@lvn.se.

BACKGROUND: In conventional laparoscopic cholecystectomy, dissection with electrocautery starts at the triangle of Calot. In a randomized single-center trial, the fundus-first method (dome down) using ultrasonic dissection was faster, involved less pain or nausea, and had a shorter postoperative sick leave. This may relate to the fundus-first method or to the ultrasonic dissection. METHODS: In a multicenter trial, 243 elective patients were randomized to conventional laparoscopic cholecystectomy

using electrocautery (n = 85) or the fundus-first method using either electrocautery (n = 81) or ultrasonic dissection (n = 77). RESULTS: The fundus-first method had a shorter operating time with ultrasonic dissection (58 min) than with electrocautery (74 min; p = 0.002). The fundus-first method using ultrasonic dissection compared with electrocautery or the conventional method produced less blood loss (12 vs. 53 or 36 ml; p < 0.001) and fewer gallbladder perforations (26% vs. 46% or 49%; p = 0.005). Also, the pain and nausea scores at 4 and 6 h were lower, and the sick leave was shorter (6.1 vs. 9.4 and 9 days, respectively; p < 0.001). CONCLUSION: The fundus-first method using ultrasonic dissection is associated with less blood loss, fewer gallbladder perforations, less pain and nausea, and shorter sick leave than the conventional and fundus-first method using electrocautery. The difference seems related to the use of ultrasonic dissection.