



Available online at
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com/en



Press review

C. Mariette^{a,*}, S. Benoist^b

^a Service de chirurgie digestive et générale, hôpital Claude-Huriez, CHRU, place de Verdun, 59037 Lille cedex, France

^b Service de chirurgie digestive, hôpital du Kremlin-Bicêtre, 78, rue du Général-Leclerc, 94275 Le Kremlin-Bicêtre, France

Available online 30 July 2014

- Orci LA, Meier RP, Morel P, et al. Systematic review and meta-analysis of percutaneous subclavian vein puncture versus surgical venous cut-down for the insertion of a totally implantable venous access device. *Br J Surg* 2014;101:8–16. <http://dx.doi.org/10.1002/bjs.9276>.

Background

Totally implantable venous access devices (TIVADs) are commonly used in patients with cancer. Although several methods of implantation have been described, there is not enough evidence to support the use of a specific technique on a daily basis. The objective of this study was systematically to assess the literature comparing percutaneous subclavian vein puncture with surgical venous cut-down.

Methods

Medline, Embase and the Cochrane central register of controlled trials were searched by two independent authors. No time limits were applied. A systematic review and meta-analysis was carried out according to the recommendations of the Cochrane collaboration, including randomized clinical trials comparing primary percutaneous subclavian vein puncture with surgical venous cut-down.

Results

Six trials were included, with 772 patients overall. The primary implantation failure rate was significantly lower for the percutaneous approach compared with surgical

cut-down (odds ratio (OR) 0.26, 95% confidence interval (CI) 0.07 to 0.94; $P=0.039$). There was no evidence supporting a significant difference in terms of risk of pneumothorax, haematoma, venous thrombosis, infectious events or catheter migration. After taking between-study heterogeneity into account by using a random-effects model, procedure duration was not significantly longer for surgical cut-down: weighted mean difference +4 (95% CI –12 to 20) min ($P=0.625$).

Conclusion

Percutaneous subclavian vein puncture is associated with a higher TIVAD implantation success rate and a procedure duration similar to that of surgical cut-down. Pneumothorax develops exclusively after percutaneous puncture and requires special attention from clinicians dealing with TIVAD insertion.

Comments

1. Contrary to a recent retrospective study suggesting that the complication rate, particularly the rate of pneumothorax [1], was higher after percutaneous subclavian vein puncture (PSCVP), this meta-analysis did not find any significant difference pointing in this direction. Nonetheless, there is a clear tendency, although not statistically significant (OR 1.52 95% CI 0.47–4.92), indicating an increased risk of pneumothorax in the PSCVP group.
2. Interestingly, there were four times fewer implantable device failures after PSCVP. The procedure requires a specific learning phase, but the learning curve is very short, irrespective of whether the procedure is performed by radiologists, anesthesiologists or surgeons [2].

* Corresponding author.

E-mail address: c-mariette@chru-lille.fr (C. Mariette).

3. Of note, the conversion rate from one technique to the other was 9.1%, the main reasons for failure of the surgical approach being inadequate vein size or anatomical variations.
4. Because of the potential severity of accidents, even the rare compressive hematoma, or pneumothorax (0.9%) during PSCVP, Doppler guided PSCVP is being proposed more and more often, as this technique has been validated by meta-analyses [3,4] and recommendations [5].
5. Lastly, certain complications have not been reported herein, such as accidental arterial punctures, nerve paralysis, malpositioning or exteriorizations.

References

- [1] Eur Surg 2012;44:331–335.
- [2] Br J Surg 2009;96:1129–1134.
- [3] BMJ 2003;327:361.
- [4] Crit Care Med 1996;24:2053–2058.
- [5] NICE guidelines <http://guidance.nice.org.uk/TA49/>

- de Mestral C, Rotstein OD, Laupacis A, et al. Comparative operative outcomes of early and delayed cholecystectomy for acute cholecystitis: a population-based propensity score analysis. Ann Surg 2014;259:10–5. <http://dx.doi.org/10.1097/SLA.0b013e3182a5cf36>.

Objective

To compare the operative outcomes of early and delayed cholecystectomy for acute cholecystitis.

Background

Randomized trials comparing early-to-delay cholecystectomy for acute cholecystitis have limited contemporary external validity. Furthermore, no study to date has been large enough to assess the impact of timing of cholecystectomy on the frequency of serious rare complications including bile duct injury and death.

Methods

This is a population-based retrospective cohort study of patients emergently admitted to hospital with acute cholecystitis and managed with cholecystectomy over the period of April 1, 2004, to March 31, 2011. We used administrative records for the province of Ontario, Canada. Patients were divided into 2 exposure groups: those who underwent cholecystectomy within 7 days of emergency department presentation on index admission (early cholecystectomy) and those whose cholecystectomy was delayed. The primary outcome was major bile duct injury requiring operative repair within 6 months of cholecystectomy. Secondary outcomes included major bile duct injury or death, 30-day post-cholecystectomy mortality, completion of cholecystectomy with an open approach, conversion among laparoscopic cases, and total hospital length of stay. Propensity score methods were used to address confounding by indication.

Results

From 22,202 patients, a well-balanced matched cohort of 14,220 patients was defined. Early cholecystectomy was associated with a lower risk of major bile duct injury [0.28% vs. 0.53%, relative risk (RR)=0.53, 95% confidence interval (CI): 0.31–0.90], of major bile duct injury or death (1.36% vs 1.88%, RR=0.72, 95% CI: 0.56–0.94), and, albeit non-significant, of 30-day mortality (0.46% vs 0.64%, RR=0.73, 95% CI: 0.47–1.15). Total hospital length of stay was shorter with early cholecystectomy (mean difference 1.9 days, 95% CI: 1.7–2.1). No significant differences were observed in terms, open cholecystectomy (15% vs 14%, RR = 1.07, 95% CI:

0.99–1.16) or in conversion among laparoscopic cases (11% vs 10%, RR = 1.02, 95% CI: 0.93–1.13).

Conclusions

These results support the benefit of early over-delayed cholecystectomy for patients with acute cholecystitis.

Comments

1. Although several randomized trials have provided answers to this same question [1-6], the value of the present study resides in (i) verification that results found in the overall population reflect those of the controlled studies and (ii) the possibility of studying the incidence of rare events such as bile duct injuries or death, because of the large numbers involved.
2. This study shows therefore the real value of early cholecystectomy after acute cholecystitis, with less post-operative morbidity, in particular biliary, and a tendency toward less post-operative mortality. Meta-analyses of randomized studies were unable to show the same benefits [6].
3. It may be assumed that late cholecystectomy is difficult because of inflammatory fibrosis in the triangle of Calot, resulting from bouts of cholecystitis during the interval before surgery.
4. Interestingly, this study suggests that the traditional 48 h interval before operation can be stretched up to seven days.
5. Nonetheless, it is possible that certain confounding factors were not taken into consideration in the propensity score and could have influenced outcome such as the severity of cholecystitis and the experience of the surgeon. In addition, biliary complications treated medically were not analyzed.

References

- [1] Ann Surg 1998;227:461–467.
- [2] Br J Surg 1998;85:764–767.
- [3] Surg Endosc 2004;18:1323–1327.
- [4] J Gastrointest Surg 2003;7:642–645.
- [5] Cirugna Espanola 1999;66:223.
- [6] Br J Surg 2010;97:141–150.

- Khanna A, Sezen E, Barlow A, et al. Randomized clinical trial of a simple pulmonary recruitment manoeuvre to reduce pain after laparoscopy. Br J Surg 2013;100:1290–4. <http://dx.doi.org/10.1002/bjs.9202>

Background

Shoulder tip and abdominal pain following laparoscopic procedures are well-recognized causes of postoperative morbidity. In this double-blind randomized clinical trial attempts were made to reduce postoperative pain in patients undergoing laparoscopic surgery by implementing a simple intraoperative technique.

Methods

Patients undergoing elective laparoscopic cholecystectomy or laparoscopic transabdominal preperitoneal inguinal hernia repair were randomized to receive either the current standard treatment (control group) or an intervention to remove residual carbon dioxide. In the intervention group, the pneumoperitoneum was removed at the end of the operation by placing the patient in the Trendelenburg position and utilizing a pulmonary recruitment manoeuvre consisting of two manual inflations to a maximum pressure of 60cm H₂O. In the control group, residual pneumoperitoneum was evacuated at the end of the

Download English Version:

<https://daneshyari.com/en/article/6110480>

Download Persian Version:

<https://daneshyari.com/article/6110480>

[Daneshyari.com](https://daneshyari.com)