Journal of Visceral Surgery (2017) 154, 51—58

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 C.-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 3 February 2017

Adam R, Imai K, Castro Benitez C, et al. Outcome after associating liver partition and portal vein ligation for staged hepatectomy and conventional two-stage hepatectomy for colorectal liver metastases. Br J Surg 2016;103:1521—9. http://dx.doi.org/10.1002/bjs.10256

Background

Although associating liver partition and portal vein ligation for staged hepatectomy (ALPPS) has been increasingly adopted by many centres, the oncological outcome for colorectal liver metastases compared with that after two-stage hepatectomy is still unknown.

Methods

Between January 2010 and June 2014, all consecutive patients who underwent either ALPPS or two-stage hepatectomy for colorectal liver metastases in a single institution were included in the study. Morbidity, mortality, disease recurrence and survival were compared.

Results

The two groups were comparable in terms of clinicopathological characteristics. ALPPS was completed in all 17 patients, whereas the second-stage hepatectomy could not be completed in 15 of 41 patients. Ninety-day mortality rates for ALPPS and two-stage resection were 0 per cent (0 of 17) versus 5 per cent (2 of 41) ($P = 0.891$). Major complication rates (Clavien grade at least III) were 41 per cent (7 of 17) and 39 per cent (16 of 41) respectively ($P = 0.999$). Overall survival was significantly lower after ALPPS than after two-stage hepatectomy: 2-year survival 42 versus 77 per cent respectively ($P = 0.006$). Recurrent disease was more often seen in the liver in the ALPPS group. Salvage surgery was less often performed after ALPPS (2 of 8 patients) than after two-stage hepatectomy (10 of 17).

Conclusion

Although major complication and 90-day mortality rates of ALPPS were similar to those of two-stage hepatectomy, overall survival was significantly lower following ALPPS.

Comments

1. Clearly the results of this pilot study should be reiterated with a larger cohort but if these catastrophic results are confirmed, it is probable that the technique should be discontinued for this indication.
2. Other publications have reported that the prognosis of the subgroup of patients who do not undergo the second stage of the two-stage technique was poor [1,2]. In this study, subgroup analysis found that survival of the 17 patients who underwent ALPPS was slightly worse than that of the 15 patients in the staged technique who did not undergo the second stage (42% *vs.* 50%, $P = 0.269$) but noticeably inferior to that of the 36 patients completing the second stage in the staged technique arm (42% *vs.* 82%, $P = 0.004$).
3. All the patients in the ALPPS group had recurrence during the first postoperative year. It is probable that the ultra-rapid hypertrophy induced by ALPPS has a particularly deleterious effect on micro-metastases left in place.
4. Operative mortality for ALPPS was nil in this monocenter study, probably related to the expertise of the center; post-operative mortality in the multicenter French [3] or international [4] studies ranges from 8 to 12%.

References

[1] Ann Surg 2015;262:772—8.
[2] J Am Coll Surg 2014;219:285—94.
[3] Eur J Surg Oncol 2015;41:674—82.
[4] Ann Surg 2014;260:829—36.

Borstlap WA, Coeymans TJ, Tanis PJ, et al. Meta-analysis of oncological outcomes after local excision of pT1-2 rectal cancer requiring adjuvant (chemo)radiotherapy or completion surgery. Br J Surg 2016;103:1105—16. http://dx.doi.org/10.1002/bjs.10163

Background

Completion total mesorectal excision (TME) is advised for high-risk early (pT1/pT2) rectal cancer following transanal removal. The main objective of this meta-analysis

* Corresponding author.
E-mail address: christophe.mariette@chru-lille.fr (C. Mariette).

1878-7886/$ — see front matter
http://dx.doi.org/10.1016/j.jviscsurg.2017.01.003

was to determine oncological outcomes of adjuvant (chemo)radiotherapy as a rectum-preserving alternative to completion TME.

Methods

A literature search using PubMed, Embase and the Cochrane Library was performed in February 2015. Studies had to include at least ten patients with pT1/pT2 adenocarcinomas that were removed transanally and followed by either adjuvant chemoradiotherapy or completion surgery. A weighted average of the logit proportions was determined for the pooled analyses of subgroups according to treatment modality and pT category.

Results

In total, 14 studies comprising 405 patients treated with adjuvant (chemo)radiotherapy and seven studies comprising 130 patients treated with completion TME were included. Owing to heterogeneity it was not possible to compare the two strategies directly. However, the weighted average local recurrence rate for locally excised pT1/pT2 rectal cancer treated with adjuvant (chemo)radiotherapy was 14% (95%CI: 11—18%), *versus* 7% (95%CI: 4—14%) following completion TME. The weighted averages for distance recurrence were 9 (6 to 14) and 9 (5 to 16) percent respectively. Weighted averages for local recurrence rate after adjuvant chemo(radiotherapy) and completion TME for pT1 were 10 (4 to 21) and 6 (3 to 15) percent respectively. Corresponding averages for pT2 were 15 (11 to 21) and 10 (4 to 22) percent respectively.

Conclusion

A higher recurrence rate after transanal excision and adjuvant (chemo)radiotherapy must be balanced against the morbidity and mortality associated with mesorectal excision. A reasonable approach is close follow-up and salvage mesorectal surgery as needed.

Comments

1. This meta-analysis, although very descriptive, should not have an enormous clinical impact because it only reinforces the dogma of the need for salvage proctectomy when the histological features of locally excised tumors are unfavorable. Notwithstanding, it can serve as the reference for a future randomized trial comparing the two strategies.
2. One of the limitations of most of the published retrospective studies is that the indications for salvage surgery are based on various histological criteria that do not have the same prognostic value. For example, it is clear that a pT2 tumor has a greater risk of recurrence than a pT1 tumor with only one unfavorable criterion such as neoplastic vascular embolism. Moreover, incomplete resection, an obvious factor of poor prognosis because of potential tumor cell dissemination in the mesorectum, should be analyzed separately, especially when TME was performed laparoscopically, under insufflation. It has been reported that in situations with equivalent tumor stage, the prognosis of salvage proctectomy after local excision was worse than after initial first-line proctectomy [1]; the question that arises is whether or not to associate radiochemotherapy to the salvage proctectomy.
3. Quality of life should be measured in future trials comparing the two attitudes, because it my be that quality of life of patients with a preserved irradiated rectum is not better than that of patients, in particular the young adult, undergoing colo-anal anastomosis.

Reference

[1] Eur J Surg Oncol 2013;39:1225—9.

Mokdad AA, Minter RM, Zhu H, et al. Neoadjuvant therapy followed by resection versus upfront resection for resectable pancreatic cancer: a propensity score matched analysis. J Clin Oncol 2016. pii: JCO685081. [Epub ahead of print]

Purpose

To compare overall survival between patients who received neoadjuvant therapy (NAT) followed by resection and those who received upfront resection (UR)-as well as a subgroup of UR patients who also received adjuvant therapy-for early-stage resectable pancreatic adenocarcinoma.

Patients and methods

Adult patients with resected, clinical stage I or II adenocarcinoma of the head of the pancreas were identified in the National Cancer Database from 2006 to 2012. Patients who underwent NAT followed by curative-intent resection were matched by propensity score with patients whose tumors were resected upfront. Overall survival was compared by using a Cox proportional hazards regression model. Early postoperative and oncologic outcomes were evaluated.

Results

We identified 15,237 patients with clinical stage I or II resected pancreatic head adenocarcinoma. From the NAT group, 2005 patients (95%) were matched with 6015 patients who underwent UR. The NAT group was associated with improved survival compared with UR (median survival, 26 months v 21 months, respectively; stratified log-rank $P < .01$; hazard ratio, 0.72; 95% CI, 0.68 to 0.78). Patients in the UR group had higher pathologic T stage (pT3 and T4: 86% v 73%; $P < .01$), higher positive lymph nodes (73% v 48%; $P < .01$), and higher positive resection margin (24% vs 17%; $P < .01$). Compared with a subset of UR patients who received adjuvant therapy, NAT patients had a better survival (adjusted hazard ratio, 0.83; 95% CI, 0.73 to 0.89).

Conclusion

NAT followed by resection has a significant survival benefit compared with UR in early-stage, resected pancreatic head adenocarcinoma. These findings support the use of NAT, particularly as a patient selection tool, in the management of resectable pancreatic adenocarcinoma.

Comments

1. Caution is warranted before interpreting the conclusions of this registry study because there are several methodological flaws that the propensity study cannot eliminate. The main bias is that the study was not performed with intention to treat, which means that the outcome in the chemotherapy group could seem, falsely, to be improved. Effectively, to perform neoadjuvant chemotherapy, it is necessary to obtain biopsy specimens of the tumor and most often perform biliary drainage in patients with jaundice. Of note, in this study, all the patients who had a complication before chemotherapy was performed were excluded. Moreover, while several of the socio-economic results were recognized, on the other hand, many of the prognostic factors, such as malnutrition, tumor de-differentiation, the levels of tumor markers, and onset of pancreatic fistula were not noted and therefore not included in the propensity score or the multivariable analysis.
2. This study confirms that in case of initially resectable tumors, the R1 resection rate remains high and in case of upfront surgery, neoadjuvant chemotherapy is administered in only two thirds of the patients. These are the two main arguments in favor of neoadjuvant chemotherapy.
3. In this study, none of the patients received trichemotherapy such as Folfirinox, which is considered