

DOES EPIDURAL ANALGESIA INCREASE SURVIVAL AFTER MAJOR ABDOMINAL SURGERY FOR CANCER?

Marie Binczak, M.D., Elodie Tournay, Ph.D., Valérie Billard, M.D., Annie Rey, Ph.D., Christian Jayr, M.D.
IGR, Villejuif; Centre Rene Huguenin, St Cloud, France

Introduction: Association of loco regional analgesia with general anesthesia seems to decrease cancer recurrence and mortality after breast or prostate cancer surgery, compared to general anesthesia and opioid analgesia [1-2]. These retrospective studies raise a major clinical impact question. The goal of this study was to evaluate the survival without cancer recurrence of patients having undergone major intra-abdominal surgery for cancer with either epidural bupivacaine or parenteral morphine analgesia.

Method: A follow up of patients included in a previous prospective randomized study was made over a 15 year period.[3]. Patients scheduled for major abdominal surgery for cancer were randomized in two groups: one group received general anesthesia with fentanyl followed by parenteral morphine analgesia (GA group) and the other group received general anesthesia with bupivacaine thoracic epidural followed by post-operative epidural bupivacaine plus morphine analgesia (EPD group). Cancer stages were collected. The comparison of survival curves between the two groups was made by a Logrank test. A multivariate analysis was made on predictive factors for survival without cancer recurrence (Model of Cox).

Results: In the initial study, 153 patients had been included but 21 patients were excluded for benign tumor. Finally, 132 patients were analysed: 63 patients in the GA group and 69 in the EPD group.

The survival rate without cancer recurrence or metastases during the first 5 years is 43 % [95%IC: 32-55] in the EPD group and 24 % [95%IC: 15-36] in the GA group. The difference is not statistically significant ($p=0.16$).

The univariate analysis shows that predictive factors correlated with the survival are: tumor location, initial surgery in the absence of cancer recurrence, complete resection, WHO grade, and intraoperative blood transfusion.

The multivariate analysis shows that independent predictive factors for survival without cancer recurrence are only complete resection [RR=4.20 (95%CI: 2.62-6.76)], and the WHO grade 0 [0/1-2, RR=2.21 (95% CI:1.36-3.59)]. Also, post operative analgesia technique is not a statistically significant predictive factor [EPD / GA, RR=1.3(95%CI: 0.89-2.96)].

Discussion: Even if there is a statistically non significant trend on survival curves showing a beneficial effect of the epidural analgesia, uni and multivariate analysis does not show that post operative analgesia technique influence the survival without cancer recurrence after cancer abdominal surgery.

References:

1. Anesthesiology 2006.105(4): p.660-4
2. Anesthesiology 2008.109(2): p.180-7 ;
3. Anesthesiology 1993.78(4): p.666-76.