Long-Term Outcome after Liver Resection for Colorectal Liver Metastasis: open vs laparoscopic approach

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BACKGROUND
Advancements in surgical technology, surgical technique, and postoperative care have aided in lifting barriers to laparoscopic liver resection.

AIM
The aim of this study was to compare the long-term outcomes of laparoscopic liver resection with those of open liver resection for colorectal liver metastasis between well-matched patient groups.

METHODS
From 2000 to 2013, 172 liver resections were performed for colorectal liver metastasis by a single surgeon. Of them 110 cases were done laparoscopically.

Propensity score matching was performed between open and laparoscopic approach; based on age, gender, ASA score, number and maximum dimension of the metastasis, presence of bi-lobar or synchronous disease, margin status and the presence of extrahepatic metastasis. Survival was calculated using Kaplan-Meier method.

RESULTS
- 38 patients were included in each group.
- Overall median survival was 46 months for the open group, compared with 53 months for the laparoscopic group.
- Disease-free median survival was 18 months vs 19 months for the open and laparoscopic group, respectively.
- 5-year actuarial survival was 38.8% for the open group compared to 43.8% for the laparoscopic group.
- 5-year actual survival was 25% for the open group compared to 35% for the laparoscopic group.

The differences were not statistically significant.

CONCLUSION
Our study showed comparative long-term survival between open and laparoscopic groups, providing evidence regarding safety and efficacy of laparoscopic hepatic resections for colorectal liver metastasis.

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