INTRODUCTION

Patients with colorectal cancer liver metastases (CRCLM) get survival benefit by curative liver resections. Associating liver partition and portal vein ligation (ALPPS) offers rapid remnant regeneration with a two stage procedure. Here we present our ALPPS experience for treatment of CRCLM.

METHODS

Eighteen patients who were operated with ALPPS approach between January 2013 and January 2018 at Ankara University Ibni Sina Hospital. Future liver remnant volumes were calculated with a semiautomated liver volume calculator software from preoperative and postoperative computed tomography (CT) scans. Outcomes related to remnant regenerations, survival and complications retrospectively analyzed.

RESULTS

Right trisectionectomy for eight patients, extended right hepatectomy for four patients, left trisectionectomy for three patients, right hepatectomy for one patient were performed. Left hepatectomy and right posterior sectionectomy was performed for one patient. Second stage surgery could not be done for one patient because of dense vascularized adhesions in spite of satisfactory FLR volume increase.

Mean patient age was 55.5. Mean FLR increase ratio was 71.53%. Median interval between two stages was 10 days. Mean hospital stays after stage 1 and stage 2 surgery were 10.47 and 17.07 days. One patient experienced bile leak requiring intervention and one patient had pulmonary embolism after stage 1. One patient had one intraabdominal abscess, one pneumonia, two bile leak and one bile fistula occurred after stage 2. All but one patient had R0 resection in pathologic examination. There were two mortality within postoperative 90 days. Three patients were died of disease recurrence after 17, 20 and 30 months after stage 2. Kaplan – Meier survival analysis revealed 81%, 57% and 57% expected survival for 1, 3, and 5 years respectively.

CONCLUSION

ALPPS procedure may be a curative option for patients with CRCLM that were evaluated as unresectable disease with conventional methods however with serious morbidity and morbidity.