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Short Communication

Medial-To-Cranial Approached Laparoscopic Right Hemicolectomy for Right-Sided Colon Cancer

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Keywords

- Colon cancer
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Abstract

There are several procedures for laparoscopic right hemicolectomy of the right-sided colon cancer including medial, retroperitoneal, cranial-to-caudal approach which have each benefit. We have developed new approach "medial-to-cranial approach". The key characteristic technical points in medial-to-cranial approach is that the accessory right colic vein and middle colic vessels are divided along the surgical trunk using medial approach, then dissection of the ascending and transverse mesocolon from retroperitoneal tissues, duodenum, and pancreatic head after division of the ileum intracorporeally by linear stapler is easily conducted using cranial approach.

ABBREVIATIONS

ICV: Ileocolic Vessels; SMV: Superior Mesenteric Vein; ARCV: Accessory Right Colic Vein; MCV: Middle Colic Vessels

INTRODUCTION

Although techniques for laparoscopic right hemicolectomy of the right-sided colon cancer are well defined [1,2], there are several procedures including medial, retroperitoneal, cranial-to-caudal approach which have each benefit [3-5]. We have developed new approach "medial-to-cranial approach". Here we present this useful approach for right-sided colon cancer.

METHODS

First, the pedicle of ileocolic vessels (ICV) is identified and the mesocolon and second portion of duodenum are dissected. The periphery of the superior mesenteric vein (SMV) is exposed. The ICV are then divided at origin (Figure 1). The transverse mesocolon is separated from pancreatic head, this procedure uncovers the accessory right colic vein (ARCV) and the gastrocolic trunk (Figure 2). The middle colic vessels (MCV) can easily be identified below the lower edge of the pancreas and divided at origin of the right branch of MCV (Figure 3). Next step is division of the ileum intracorporeally by linear stapler (Figure 4). The ascending mesocolon is separated from the retroperitoneal tissues up to the hepatocolic ligament cranially (Figure 5). The key characteristics in our procedure is that ARCV and MCV are divided along SMV using medial approach, then dissection of the ascending and transverse mesocolon from retroperitoneal tissues and pancreatic head is easily conducted using cranial

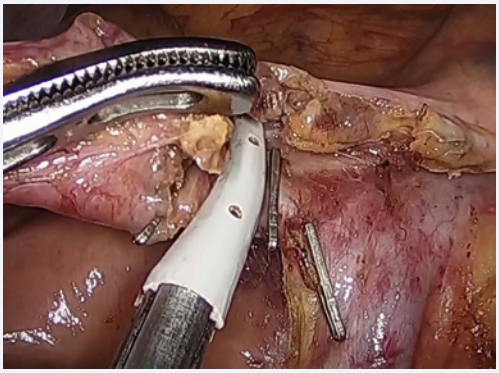

Figure 1 The ICV are divided at origin.

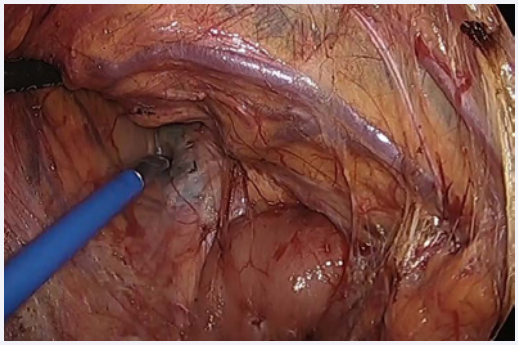

Figure 2 The transverse mesocolon is separated from pancreatic head, this procedure uncovers ARCV.

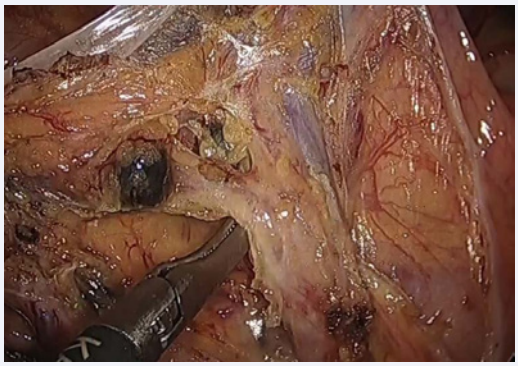

Figure 3 MCV can easily be identified below the lower edge of the pancreas and divided at origin of the right branch of MCV.®

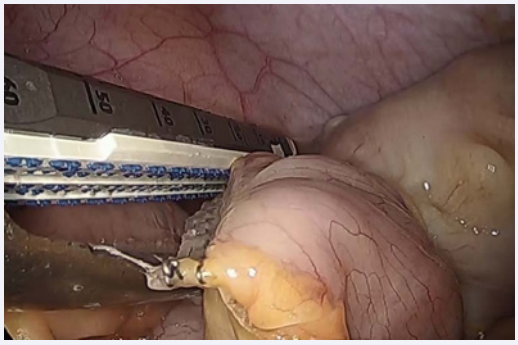

Figure 4 The ileum is divided intracorporeally by linear stapler.

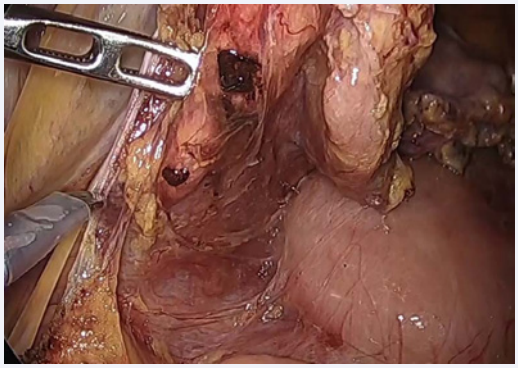

Figure 5 The ascending mesocolon is separated from the retroperitoneal tissues up to the hepatocolic ligament cranially.

approach.

RESULTS

We performed laparoscopic right hemicolectomy in this manner for 42 patients. The mean operative time and blood loss were 183 min and 13 ml, respectively. There were no recurrent cases at a median follow-up period of 20 months.

CONCLUSION

We consider this approach to be safe and useful during laparoscopic right hemicolectomy.

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