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Comment: Leiomyosarcoma of the retrohepatic vena cava: Report of a case treated with resection and reconstruction with polytetrafluoroethylene vascular graft

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To the Editor,

We read with interest the paper titled "Leiomyosarcoma of the retrohepatic vena cava: Report of a case treated with resection and reconstruction with polytetrafluoroethylene vascular graft" by Yankol et al. (1). In this case report, the authors describe a successful treatment of a retrohepatic vena cava leiomyosarcoma with resection and polytetrafluoroethylene vascular graft reconstruction. As mentioned in the manuscript surgical resection with negative margins is the gold standard treatment. But after resection, in conjunction with inferior vena cava (IVC) reconstruction options, there also stands another choice which is ligation without reconstruction, which is not discussed in the manuscript. Regarding to this case report, we aimed to present a patient (S.Ö,prot:806/59,F) from our clinic to whom we performed segmented IVC resection and ligation for diagnosed level 2 vena cava leiomyosarcoma. IVC was ligated above aortoiliac bifurcation and below renal veins. Because of the high graft thrombosis risk this approach was preferred instead of anastomosis. Intermittent pneumatic compression was applied and low dose fractioned heparin was given at therapeutic dosage in order to protect from deep venous thrombosis risk and lower-extremity edema. On postoperative day 3, the patient had underwent a second laparotomy because of intraabdominal bleeding. Perioperative exploration revealed an oozing type bleeding from the proximal caval stump. After hemostasis the patient sent to intensive care unit for close follow-up. On postoperative day 8, chylous drainage was encountered and oral feeding was stopped following total parenteral nutrition (TPN) support. 2 weeks after TPN treatment the drainage was turned to serous character and oral feeding was restarted with abolishment of TPN support. Finally the patient was discharged with compression stocking and 5-mg. coumadin tb./day orally one month after surgery and she did not suffer from renal failure or lower extremity edema during her hospitalization. Pathologic findings revealed a grade 2 leomyosarcoma with negative margins. Immunohistochemistry panel showed that SMA: (+), Desmin: (+), S-100: (-) CD117: (-) Ki-67 index: 30%. Six cycles of chemotherapy was given to the patient following discharge from our clinic. Now the patient is on postoperative 8th month and there is no documented recurrence or metastasis.

The proper technique following IVC resection in the literature is lacking. Caval reconstruction is associated with longer operative time and has its own morbidity and mortality rates. On the other hand in the absence of sufficient collateral venous flow or in cases of interruption of vital organ vasculature, it is necessary to make a vascular reconstruction (2).

Daylami et al. (3) claimed in their paper that reconstruction of the IVC was not necessary for resection of tumors below the level of the hepatic veins in most if not all cases. They also mentioned lower-extremity edema and acute renal failure as an albeit transient and early postoperative complication. According to their series with 6 patients, 2 of them developed chylous leak and 1 of them was treated with dietary modification and percutaneous drainage and the other with a Denver shunt.

We wonder if the authors have checked the patency of graft during follow-up because as Hirohashi et al. (4) suggested in their case report, thrombosis may occur as a late complication in an inferior vena caval graft. In conclusion, we believe that whenever possible, primary IVC resection without reconstruction in the management of lower IVC leiomyosarcoma should be preferred due to its benefits by means of shorter operation time and acceptable morbidity and mortality rates.

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REFERENCES

1. Yankol Y, Mecit N, Kanmaz T, Acarlı K. Leiomyosarcoma of the retrohepatic vena cava: Report of a case treated with resection and reconstruction with polytetrafluoroethylene vascular graft. Ulus Cerrahi Derg 2015;31:162-165 [CrossRef]
2. Drukker L, Alberton J, Reissman P. Leiomyosarcoma of the inferior vena cava: radical surgery without vascular reconstruction. Vasc Endovascular Surg 2012;46:688-690. [CrossRef]
3. Daylami R, Amiri A, Goldsmith B, Troppmann C, Schneider PD, Khatri VP. Inferior vena cava leiomyosarcoma: is reconstruction necessary after resection? J Am Coll Surg 2010;210:185-190.
4. Hirohashi K, Shuto T, Kubo S, Tanaka H, Tsukamoto T, Shibata T, et al. Asymptomatic thrombosis as a late complication of a retrohepatic vena caval graft performed for primary leiomyosarcoma of the inferior vena cava: report of a case. Surg Today 2002;32:1012-1015. [CrossRef]

Author's Reply

To the Editor,

We thank to Değer et al. for their interest and comments with complementary contributions regarding our case report " Leiomyosarcoma of retrohepatic vena cava: Report of a case treated with resection and reconstruction with polytetrafluoroethylene vascular graft".

Değer et al. also presented their case without reconstruction which is the one of the alternative treatment option in the literature with success. As they also mentioned every treatment techniques have their own complication risks after surgery.

As we mentioned in our conclusion; treatment at a center experience in liver resection and transplantation allows better opportunity for safe resection and reconstruction with shorter operation time and acceptable mortality and morbidity rates. The additional time for reconstruction with PTFE graft was only 15-20 minutes which was not very important for this case.

We have been checking the patency of the PTFE vascular graft during the follow-up period with clinical and radiological findings. By the time no thrombosis has been occurred.

We believe that both techniques have their own serious risks after surgery. We preferred to treat this case with most physiological treatment option which was applied many times in the literature with successful results.

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