



Hepatic Auto-Transplantation with Ex Situ Excision and Inferior Vena Cava Replacement for Leiomyosarcoma Extending from Bifurcation of Common Iliac Vein to Supra-Hepatic Vena Cava

Ki-Hun Kim, Deok-Bog Moon, Sung-Gyu Lee

University of Ulsan, Korea

Ex situ resection and hepatic autotransplantation devised by Pichlmayr may be an answer for a lesion's proximity or invasion with major hepatic veins. This patient was a 31-year-old female with leiomyosarcoma extending from suprahepatic vena cava to bifurcation of common iliac vein deemed not accessible by conventional *in situ* surgical techniques. The liver and retrohepatic inferior vena cava was removed *en bloc* and taken to the backtable where the neoplasm invading the inferior cava wall was removed together with the inferior vena cava. The inferior vena cava was then replaced by a 26-mm Dacron graft proximally and 20-mm ringed Gortex graft distally, and the outflows of the liver was re-constructed to a single opening using longitudinally opened autogenous great saphenous vein. The liver was then autotransplanted by Piggyback technique. Both renal veins were not reconstructed because both gonadal veins were preserved well during operation. The postoperative course was uneventful.

Case Summary

This patient was a 31-year-old female with leiomyosarcoma extending from suprahepatic vena cava to bifurcation of common iliac vein and left hepatic vein deemed not accessible by conventional *in situ* surgical techniques. The liver and retrohepatic inferior vena cava was removed *en bloc* and taken to the backtable where the neoplasm invading the inferior cava wall was removed together with the inferior vena cava. The inferior vena cava was then replaced by a 26-mm Dacron graft proximally and 20-mm ringed Gortex graft distally, and the outflows of the liver was re-constructed to a single opening using longitudinally opened autogenous great saphenous vein. The liver was then autotransplanted by Piggyback technique. Both renal veins were not reconstructed because both gonadal veins were preserved well during operation. The postoperative course was uneventful and the patient is in good health until now.

Conclusion

En bloc excision with liver and hepatic autotransplantation is a useful and safe strategy for huge leiomyosarcoma extending to whole inferior vena cava and intrahepatic vein.