Radical surgery for Budd-Chiari syndrome through exposure of the entire inferior vena cava of the hepatic segment.

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BACKGROUND: Several kinds of radical surgery for the treatment of Budd-Chiari syndrome (BCS) have been devised. We have described preliminary efforts to treat BCS using a novel radical resection technique to expose the entire inferior vena cava (IVC) of the hepatic segment. METHODS: Sixty patients with BCS were treated by radical resection, including 46 men and 14 women. BCS patients ranged in age from 11 to 62 years, with 3 months to 11 years since the BCS diagnosis. The lesions included membrane occlusion of the IVC in 16 patients, double membranes within the IVC in 2 patients, double membranes within the IVC and the hepatic vein (HV) in 3 patients, IVC membrane with distal thrombosis in 10 patients, long segment thrombosis of the IVC in 5 patients (organized thrombosis in 2 patients, fresh thrombosis in 3 patients), occlusion of the outlet of the HVs due to mural thrombosis in 2 patients, segmental occlusion of the IVC in 3 patients, membranes within the HV with IVC stenosis due to protrusion of HV stent in 1 patient, HV membranes in 11 patients, extensive occlusion of HVs in 1 patient, the whole IVC tumor thrombus with tumor thrombus of 2/3 right atrium resulting from a posterior peritoneum tumor in 1 patient, IVC leiomyosarcoma in 2 patients, IVC leiomyosarcoma with tumor thrombus into 1/2 right atrium in 1 patient, IVC thrombosis extending into right atrium in 1 patient, compression of supra-hepatic segment of IVC due to fiber trabs in 1 patient. RESULTS: All lesions were successfully resected under direct supervision. Three procedures were performed under extracorporeal circulation, 52 patients with catheterization of the right atrium, 4 patients with a cell saver, and one patient with autoretrieval of blood. The retrieved blood was from 300 ml to 4000 ml. Transfusion of banked blood was from 400 ml to 2000 ml for 14 patients. For the other patients no transfusion of banked blood was required. One patient died of renal failure peri-operatively. Newly formed IVC membrane was found for one recurrent patient whose IVC thrombosis was removed one year prior. Restenosis of the IVC was observed post-operatively without symptoms in one patient. In the other patients, no recurrent symptom was found during the follow-up periods. CONCLUSION: This novel surgery provides a clear visual field during the procedure and yields satisfactory short and long-term results.

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