POSTOPERATIVE DIAGNOSIS: , Type 4 thoracoabdominal aneurysm.,OPERATION/PROCEDURE: , A 26-mm Dacron graft replacement of type 4 thoracoabdominal aneurysm from T10 to the bifurcation of the aorta, re-implanting the celiac, superior mesenteric artery and right renal as an island and the left renal as a 8-mm interposition Dacron graft, utilizing left heart bypass and cerebrospinal fluid drainage.,DESCRIPTION OF PROCEDURE IN DETAIL: , Patient was brought to the operating room and put in supine position, and general endotracheal anesthesia was induced through a double-lumen endotracheal tube. Patient was placed in the thoracoabdominal position with the left chest up and the hips back to a 30-degree angle. The left groin, abdominal and chest were prepped and draped in a sterile fashion. A thoracoabdominal incision was made. The 8th interspace was entered. The costal margin was divided. The retroperitoneal space was entered and bluntly dissected free to the psoas, bringing all the peritoneal contents to the midline, exposing the aorta. The inferior pulmonary ligament was then taken down so the aorta could be dissected free at the T10 level just above the diaphragm. It was dissected free circumferentially. The aortic bifurcation was dissected free, dissecting free both iliac arteries. The left inferior pulmonary vein was then dissected free, and a pursestring of 4-0 Prolene was placed on this. The patient was heparinized. Through a stab wound in the center of this, a right-angle venous cannula was then placed at the left atrium and secured to a Rumel tourniquet. This was hooked to a venous inflow of left heart

bypass machine. A pursestring of 4-0 Prolene was placed on the aneurysm and through a stab wound in the center of this, an arterial cannula was placed and hooked to outflow. Bypass was instituted. The aneurysm was cross clamped just above T10 and also, cross clamped just below the diaphragm. The area was divided at this point. A 26-mm graft was then sutured in place with running 3-0 Prolene suture. The graft was brought into the diaphragm. Clamps were then placed on the iliacs, and the pump was shut off. The aorta was opened longitudinally, going posterior between the left and right renal arteries, and it was completely transected at its bifurcation. The SMA, celiac and right renal artery were then dissected free as a complete island, and the left renal was dissected free as a complete Carrell patch. The island was laid in the graft for the visceral liner, and it was sutured in place with running 4-0 Prolene suture with pledgetted 4-0 Prolene sutures around the circumference. The clamp was then moved below the visceral vessels, and the clamp on the chest was removed, re-establishing flow to the visceral vessels. The graft was cut to fit the bifurcation and sutured in place with running 3-0 Prolene suture. All clamps were removed, and flow was re-established. An 8-mm graft was sutured end-to-end to the Carrell patch and to the left renal. A partial-occlusion clamp was placed. An area of graft was removed. The end of the graft was cut to fit this and sutured in place with running Prolene suture. The partial-occlusion clamp was removed. Protamine was given. Good hemostasis was noted. The arterial cannula, of course, had been removed

when that part of the aneurysm was removed. The venous cannula was removed and oversewn with a 4-0 Prolene suture. Good hemostasis was noted. A 36 French posterior and a 32 French anterior chest tube were placed. The ribs were closed with figure-of-eight #2 Vicryl. The fascial layer was closed with running #1 Prolene, subcu with running 2-0 Dexon and the skin with running 4-0 Dexon subcuticular stitch. Patient tolerated the procedure well.