Surgeons remove 11-pound desmoid tumor, transplant bowel back into patient

Published on January 21, 2008 at 2:49 AM

Surgeons at the University of Illinois Medical Center at Chicago removed an 11-pound desmoid tumor from the abdominal cavity of an Arkansas man and performed a transplant using a segment of his own small intestine rescued during surgery, preserving his ability to eat and digest food.

"The tumor had me feeling so ill that I couldn't eat, I had no energy -- I was about to die," said William Crook, a former construction worker who lives in Alexander, Ark.

A desmoid tumor is an aggressive soft tissue tumor that often invades and destroys surrounding healthy tissue and organs. Although the tumors do not metastasize, they can be life-threatening.

Crook, 61, suffers from Gardner's syndrome, a genetic disorder that can cause multiple polyps and desmoid tumors.

The estimated incidence of desmoid tumor in the general population is 2 to 4 per million people per year, according to the Desmoid Tumor Research Foundation.

Crook had undergone previous surgeries to remove his colon (due to numerous polyps) and part of his small intestine. The desmoid tumor began to grow following these surgeries and became so large that it was compromising his vital organs.

Surgeons at the University of Illinois Medical Center removed the large desmoid tumor that was entangled in Crook's intestine and also removed his right kidney.

"I noticed a loop of bowel, approximately three feet in length, that was not involved in the tumor," said Dr. Enrico Benedetti, head of surgery at UIC, who performed the unique operation with Dr. Jose Oberholzer, associate professor of surgery.

After removing the mass and small intestine, Benedetti preserved the graft in a cooling solution. He then transplanted the segment of small intestine -- along with two feet of proximal small bowel -- back into the patient.

Typically, removal of a tumor of that size and location leaves a patient without any functioning bowel and in need of intravenous feeding, Benedetti said.

"In this case, we were able to preserve enough small intestine to allow Mr. Crook to eat normally and resume his regular activities. I believe that this strategy could be very beneficial for patients with similar disease," he said.

"I never dreamed it would have happened," Crook said of his rapid recovery and new lease on life. "I feel great, and I'm eating everything in sight."

Surgeons at the University of Illinois Medical Center have performed 24 living-donor small intestine transplants, more than any other center in the United States. The procedure is technically similar to the small intestine auto-transplant, which has been performed in only a small number of cases worldwide.

http://www.uillinoismedcenter.org/