New Procedure Allows Diagnosis, Treatment of Small Intestine without Surgery (w/ Video)

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(PhysOrg.com) -- Physicians at UMC have started using a new technology to view and treat diseases of the small intestine previously inaccessible without major surgery.

Physicians at University Medical Center have started using double balloon enteroscopy - a new technology to view and treat diseases of the small intestine previously inaccessible without major surgery - in a first for southern Arizona.

Dr. Bhaskar Banerjee, chief of the Section of Gastroenterology at the University of Arizona College of Medicine, successfully performed double balloon enteroscopy on two patients in the UMC Endoscopy/GI Lab.

The Fujinon Double Balloon Enteroscopy System is the first endoscopic technique that allows for the entire small intestine gastrointestinal tract, including the notoriously difficult-to-access small intestine, to be directly visualized and accessed in real time.

"Balloon enteroscopy allows us to examine the small intestine, which is about 20-feet long and until recently most of it was out of reach, unless the patient had open surgery," Banerjee explained. "Over the past year, we have been using an endoscope with a single balloon, which was effective in treating patients with disorders of the small intestine, such as recurrent bleeding. However, the double balloon enteroscope has the advantage of being able to travel further into the small bowel to treat lesions that could not be reached before."

One of Dr. Banerjee's first double balloon enteroscopy patients was Robyn Manka of Portal, Ariz., whose anemia from bleeding in her gastrointestinal tract was so severe she needed repeated blood transfusions.

Until her procedure, doctors had been unable to find the source of her bleeding for months. With the double balloon enteroscopy, Dr. Banerjee found and cauterized a lesion deep in her small bowel.

"When you've been as sick as long as I have, looking for answers, it was just thrilling to find some procedure to finally address the problem," Manka said.

The outpatient procedure, which takes about 60 minutes, involves the use of a small inflatable balloon at the end of a special endoscope camera and an overtube, which is a tube that fits over the endoscope, and which is also fitted with a balloon.

With the patient under sedation or general anesthesia, the device is inserted into the mouth and physicians use a video monitor to guide it into the small bowel. By sequentially inflating and deflating one or both balloons, the endoscope can be advanced many feet into the small intestine. It also can be inserted into the small intestine, if needed, from the large bowel.

The procedure also allows physicians to collect small biopsies of the lining of the small intestine, allowing for the accurate diagnosis of Crohn's disease, celiac disease and small intestinal tumors and to identify and treat bleeding from abnormal clusters of blood vessels. The technique also can be used to remove trapped foreign bodies and resect polyps from the small intestine.

Provided by University of Arizona