A study of patients with implantable cardiac devices such as pacemakers, implantable defibrillators or left ventricular assist devices found that performing capsule endoscopy in these patients is safe and that the devices in general do not interfere with images captured by the capsule.

Capsule endoscopy is a diagnostic study of the small intestine by a miniature wireless camera swallowed by the patient. As the capsule travels through the digestive tract, images are transmitted to a recorder worn by the patient around the waist. Capsule endoscopy represents a breakthrough in the diagnosis of the small intestine, an area that is not easily reached with traditional endoscopy.

"Our assessment did not reveal any interference on the implanted cardiac device in patients undergoing capsule endoscopy," said Dr. Lucinda Harris from the Mayo Clinic Arizona. She presented her paper, "Does the beat go on? Does the video still play? Results from the largest series to date on the safety of capsule endoscopy in patients with implantable cardiac devices," at the Annual Scientific Meeting of the American College of Gastroenterology in San Diego, CA.

"The safety of these devices is particularly important in the elderly, because capsule endoscopy is most often performed for occult GI bleeding, a condition not uncommon in this group, who also have the highest number of implantable cardiac devices," explained Dr. Harris.

Dr. Harris and her colleagues from Mayo Clinic analyzed the largest series to date on the impact of capsule endoscopy on cardiac devices, and as a secondary aim looked at whether the cardiac devices had any effect on the images captured by the capsule. This retrospective study of 91 patients who underwent capsule endoscopy, all of whom had cardiac pacemakers, implantable defibrillators, or left ventricular assist devices. Researchers looked at patient demographics, pre- and post-procedure cardiac assessments, and examined the quality of the capsule endoscopy with particular reference to technical difficulties or interference with video imaging. Only one patient with a cardiac device had a 25 minute loss of capsule imaging that resumed when the capsule device recorder was replaced.

Source: American College of Gastroenterology