

Anti-tumor therapy with endoscopic ultrasound may fight cancer more safely and effectively

September 12 2008

The chairman of EUS2008 today announced that investigational research on a therapeutic technique that will allow physicians to directly inject malignant tumors with cancer fighting agents from inside the body will be presented at the 16th International Symposium of Endoscopic Ultrasonography (EUS2008) in San Francisco on September 12-13.

This technique, which uses a flexible gastrointestinal endoscope with a miniature ultrasound transducer on the tip to guide a small needle directly into a tumor, could prove to be a safer and more effective approach to administering chemotherapy since it allows doctors to deliver therapy right to the tumor and avoid damaging normal surrounding tissues. Injecting drugs directly into the cancer using endoscopic ultrasound (EUS) in combination with systemic chemotherapy to kill cancer cells that have spread may prove to be a more effective approach to some cancers.

EUS combines endoscopy and ultrasound in order to obtain the most accurate, high resolution images and information about the digestive tract and the surrounding tissue and organs. A more advanced form of EUS, called curvilinear EUS, allows doctors to operate within the lumen of the gut while at the same time detect, biopsy and treat lesions and tumors that lie outside the intestinal wall. This technique is particularly useful in patients with pancreatic, esophageal and rectal cancer.

"Curvilinear endosonography will likely become the dominant technology within the field of EUS," said co-chairman of EUS2008, Robert Hawes, M.D., Professor of Medicine and Peter Cotton Chair for Endoscopic Innovation at the Medical University of South Carolina. "The potential for accurate diagnosis using ultrasound-guided biopsy, precise staging with high resolution ultrasound images and then the enormous opportunity for new therapies with the curvilinear endoscope is why we are focusing this meeting on the use of this instrument alone."

Used in conjunction with real time imaging, EUS can help physicians to detect blood flow in blood vessels in and around tumors as well as detect and biopsy tumors and lymph nodes as small as 3-5 mm. This allows doctors to avoid puncturing blood vessels when sampling tissue, get the most accurate view of the cancer and know exactly what stage a cancer is in for optimal therapy for treatment. This could save cancer patients with late stage disease from going through unnecessary surgery. EUS may also play a role in the future of minimally invasive surgery (MIS). A new paradigm in MIS is called natural orifice transluminal endoscopic surgery (NOTES®). This entails using the stomach as a window to the abdominal cavity rather than the skin. EUS could play an important role in helping surgeons gain safe access to the abdominal cavity as part of NOTES.

EUS 2008 will be devoted to teaching current applications of curvilinear endoscopic ultrasonography in order to encourage endosonographers and gastroenterologists to become proficient in these procedures, enhance their techniques and increase collaboration with oncology surgeons. This meeting has a rich tradition dating back to the first meeting held in Stockholm, Sweden in 1982. The meeting has evolved as technology has changed and improved along with the exponential growth of endosonographers around the world.

Source: Golin/Harris International

Citation: Anti-tumor therapy with endoscopic ultrasound may fight cancer more safely and effectively (2008, September 12) retrieved 2 May 2024 from <https://medicalxpress.com/news/2008-09-anti-tumor-therapy-endoscopic-ultrasound-cancer.html>

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