ISSUES IN
ONCOLOGY

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LASER ENDOSCOPY OPENS LUMENS BLOCKED BY TUMORS

By providing symptom relief, luminal laser endoscopy can markedly contribute to quality of life for patients with advanced cancer. It can also provide palliation before or during other types of therapy.

Last year, when a patient came to Einstein for evaluation of swallowing difficulties, staff gastroenterologists discovered that she suffered from an esophageal tumor of significant size. While she underwent radiation and chemotherapy, with their attendant physical stress, she continued to experience difficulty in swallowing that threatened to compromise her nutritional status.

But Einstein specialists were able to use a laser, under endoscopic guidance, to significantly reduce the size of the patient's tumor and reopen the severely narrowed lumen of her esophagus. She enjoyed immediate symptom relief and greater comfort in eating as she continued her preoperative therapies. Eventually, she underwent successful, definitive surgery.

This is one example of the major palliative benefits realized by an increasing number of cancer patients as a result of the most recent application of laser endoscopy: resecting tumors in stenotic lumens. Most significantly, the technique has improved the quality of life for terminal cancer patients who would otherwise have spent many of their final days requiring mechanical ventilation, tube feeding, or urinary catheterization.

"Specialists can use YAG or KTP lasers endoscopically to re-establish the patency of lumens in the GI, tracheobronchial, and urinary tracts," says Einstein surgeon Mark Kaplan, MD, head of the medical center's laser program.

ISSUES IN
ORTHOPAEDICS

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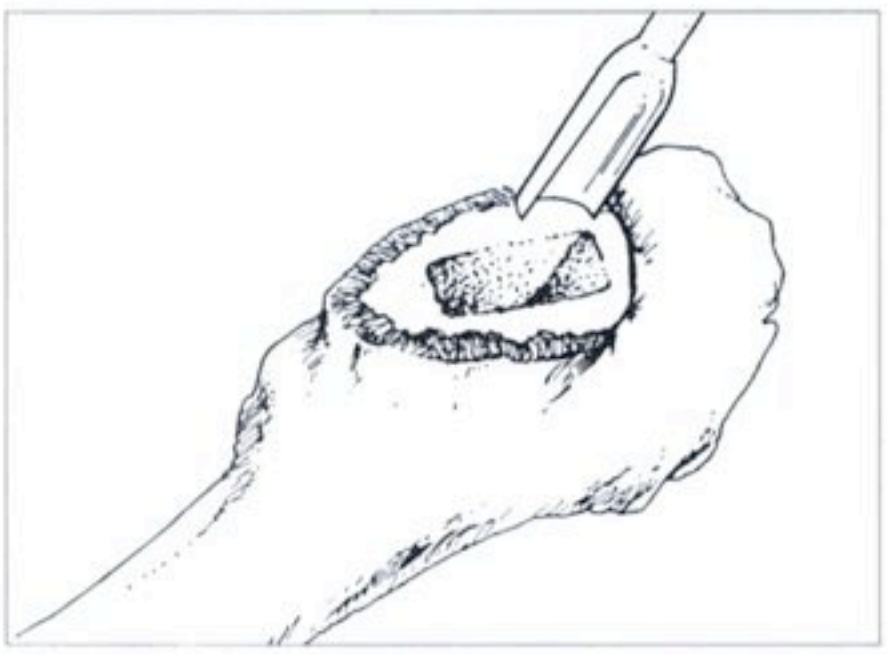
NEW ULTRASONIC CEMENT-REMOVAL DEVICE IMPROVES JOINT REVISION



Orthopaedic surgeons have begun using a new ultrasonic instrument that transmits a dynamic stress wave, which on absorption, changes bone cement to a putty-like consistency. The tool may improve revision surgery by helping to alleviate surgical damage to bone. Shown here, an ultrasonic gouge makes initial cuts in the cement in the proximal femur.

As a result of a new surgical instrument that uses ultrasonic energy to rapidly remove joint cement, revision surgery for artificial joints may soon become a briefer procedure that is less destructive to bone. Under the direction of Earl C. Marmar, M.D., orthopaedic surgeons at the Einstein-Moss Joint Replacement Center have now used the tool successfully in several hip-revision cases.

Joint replacement, one of the most important major surgeries provided by medicine today, helps many tens of thousands of individuals each year return to work and greater independence. With procedures such as total hip replacement entering their fourth decade, however, the number of revision arthroplasties needed has grown and is expected to continue to grow, possibly outstripping primary cases in total number before long.

Failure of cemented femoral components to remain fixed is the most common cause of revision surgery. In the presence of such loosening or of infection, surgeons must remove as much of the original bone cement as possible – a difficult task that can be traumatic to bone. In contrast, the technology of the new ultrasonically driven implement reduces the risk of bone damage.

ULTRAVIBRATION SOFTENS CEMENT

Revision total-hip arthroplasty, a long operation (up to nine hours) involving significant blood loss (up to 4,000 ml), can be extremely taxing to both surgeon and patient.

ISSUES IN
MEDICAL
REHABILITATION

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Volume 2 Number 1

CLUBHOUSE BUILDS SKILLS, SELF-ESTEEM FOR PERSONS WITH BRAIN INJURIES

Peer-support, self-governance, and individual needs help set the tone for the Clubhouse. Members, who have previously experienced brain injury, can use the program to reintegrate personal, social, community, and vocational skills. Here, Sharon Denny, program director (left), joins members Joe Spina and Margaret Jackson in an activity.

People who were previously dependent and unemployable following brain injury are finding new hope at an innovative community day program in Northeast Philadelphia. The Clubhouse is a new program with a philosophy, structure, and atmosphere that helps people who have experienced brain injury re-establish self-sufficiency and personal abilities. Unlike traditional treatment programs, the Clubhouse has no patients or clients, but members who assume responsibility for much of its daily operation. The Clubhouse opened in September as part of the Drucker Brain Injury Center at MossRehab Hospital.

The program is based on the Fountain House model, which for half a century has helped persons with psychiatric disabilities return to community and vocational opportunities. The model was adapted for persons with brain injuries a decade ago by Harvey E. Jacobs, PhD, Clubhouse executive director.

Potential members come from both inpatient and outpatient programs, and some have never received rehabilitation services. Members should be able to manage most personal care activities and participate in a full-day, community-based program.

"With even modest support, many people who have experienced severe brain injury can develop viable roles in their homes and communities, and establish productive activities that may help them return to work," says Jacobs. "Without such assistance these same people may end up isolated at home, or possibly in nursing homes or homeless, as family members and personal resources fade away. The key to the program involves recognizing members for their abilities over their disabilities and giving people license to succeed."

There is nothing else like the Clubhouse in the Philadelphia area, and it remains one of a handful of such programs in the world.