A BREAK FOR FRACTURES
By DR. ROCK POSITANO

February 6, 2007 -- THERE are 206 bones in your average human adult, and each one can be broken in myriad and troubling ways. Some breaks are minor and heal easily in a cast. Others can be more complicated, requiring surgery and lengthy rehabilitation. Thus, it's true that a fractured bone is never less than annoying and frequently to usually quite painful and debilitating.

But there may be a way to heal bones quicker: Zap it!

"Scientific studies have shown that electricity stimulates bone formation in the laboratory, and clinical studies have confirmed improved bone healing of problem fractures with the use of electrical stimulation," says orthopedic surgeon Dr. S. Robert Rozbruch of the Orthopedic Trauma Service at New York-Presbyterian Hospital/Weill Cornell Medical Center.

Don't worry - we're not talking about electroshock treatment, nor should you try to self-medicate by sticking your finger in a socket.

"We use electrical stimulation for many fractures as an adjuvant to our normal treatment," Rozbruch says. "The patient wears a padded coil or pads on the skin inducing a painless electromagnetic field. This field created is similar to the normal electrical impulses in the body that stimulate fracture healing," he adds. By mimicking those normal impulses, the use of electrical stimulation is like pushing a fast-forward button on fracture healing.

The bone-growth stimulator used was developed by EBI Medical Systems in Parsippany, N.J. The unit is lightweight and usually worn at night. You can wear it along with a cast or it can be a complement to any surgical treatment, and the location is customized for each individual.

While every fracture has its own personality, some needing a cast and others needing surgery, all can benefit from something that improves bone healing. Rozbruch points out that "electrical stimulation is a painless, noninvasive modality that helps fractures heal, and we often use this as an adjuvant to our routine treatment." And anything that shortens the time someone is in a cast makes everyone - doctors and patients - happier.

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