Medical Xpress

Ultrasound being used to treat fractures

October 13 2011, by Deborah Braconnier

(Medical Xpress) -- Ultrasound, the diagnostic tool first developed at the Glasgow Royal Infirmary in the 1950s to scan the body, is now being used in its fracture clinic to help heal fractured bones and speed up the recovery time.

Similar to the process used on pregnant women to see the fetus, the ultrasound waves are used at a different frequency to stimulate production of new bone cells and encourage them to mature at a more rapid rate. The waves also help the cells remove bacteria that could lead to a possible infection.

Orthopaedic surgeon Angus MacLean is the lead physician using this technology and recently used it on his patient Gary Denham. Denham had taken a fall from a 20 foot water tank and broke his ankle in eight different places. There was a very good chance that a fracture of this nature would not heal and would require amputation and if it was able to heal it would have been well over a year before he was back on his feet.

Dr. MacLean decided to try out the ultrasound treatment on Dunham. He fitted Dunham with a small ultrasound device that was held in place with a small strap. Gel was placed on the ultrasound probe and held in place for 20 minutes. While it causes no pain at all, the ultrasound does its job and stimulates the bone cells. With this treatment, Dunham's injury healed within four months and he is hoping to be able to return to work after only eight months.

Evidence shows that using ultrasound treatment on fractured bones

speeds up the healing process by up to 40 percent.
The current treatment is expensive and is currently only being used to treat complex fractures. The cost of the treatment is expected to drop over time and become a regular part of fracture treatments.

© 2011 PhysOrg.com

Citation: Ultrasound being used to treat fractures (2011, October 13) retrieved 26 April 2024 from https://medicalxpress.com/news/2011-10-ultrasound-fractures.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.