

Crutches with open cuff are designed to support your body weight on the back of the forearm support.

The straps on the top of the cuff are not designed for use in ambulation!

Their only purpose is to 'hang' the crutch from your arm when you need the use of your hands.





News Release

American Academy of Orthopaedic Surgeons

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For P.M. Release
Saturday, Feb. 15, 1997
Poster Exhibit C 025

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WIDE-HANDLED CRUTCHES REDUCE PRESSURE ON CARPAL TUNNEL

SAN FRANCISCO-Wide-handled crutches can significantly reduce maximum palmar pressures over the carpal tunnel, according to a study presented here today at the 64th annual meeting of the American Academy of Orthopaedic Surgeons.

Twenty normal subjects and 10 chronic crutch-use patients were evaluated for palmar weight-bearing using two different handle designs during crutch-assisted gait. A special sensor fit over the palm to measure maximum pressures and pressure distributions.

With use of the standard crutch handle, maximum pressures were at least 40 pounds per square inch (psi) for both groups of patients and the region of maximum palmar pressure of more than 10 psi was centered over the carpal tunnel.

Wide-handled crutches reduced the maximum pressures at least 15 psi. Wider handles also helped distribute carpal tunnel area, increasing it by approximately 50 percent, thus reducing the psi's pressure on the area. Long-term crutch users who had a significantly longer duration of maximum pressure during the gait cycle found that their neurological symptoms subsided when they switched to the wide-handled model.

Co-authors, all from the Hospital for Joint Diseases Orthopaedic Institute, New York City, are Debra Sala, MS, research physical therapist; Frederick J. Kummer, **PhD**, associate director of the Musculoskeletal Research Center; and Alfred Grant, MD, director of the Center for Neuromuscular and Developmental Disorders. Dr. Grant also is a clinical professor, department of orthopaedics, New York University, New York City.

An orthopaedic surgeon is a medical doctor with extensive training in the diagnosis and non-surgical as well as surgical treatment of the musculoskeletal system, including bones, joints, ligaments, tendons, muscles, and nerves.

The 17,000-member American Academy of Orthopaedic Surgeons is a not-for-profit organization that provides education programs for orthopaedic surgeons, allied health professionals, and the public and is an advocate for improved patient care.

The Academy's annual meeting is being held Feb. 13-17 at the Moscone Convention Center, San Francisco.

1997 Annual Meeting News Releases
Last modified 05/July/2000 by IS