

Injectable Hip Hemi-Arthroplasty

Researchers at the University of South Florida have developed a novel device for minimally invasive replacement of hip hemi-arthroplasty and uses injection of bone cement.

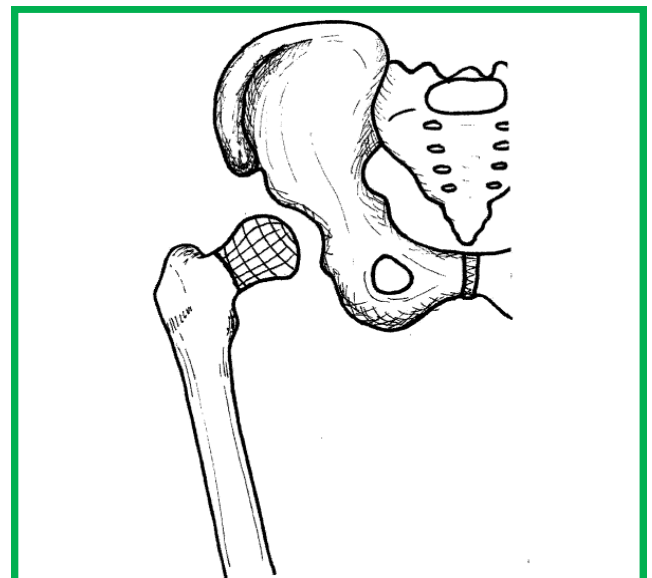
Every year, approximately 300,000 patients experience a fracture of the hip due to osteoporosis. These patients are generally elderly and often have multiple pre-existing conditions, making them poor candidates for a surgical procedure. Current treatments for hip fracture include total hip arthroplasty, hip hemi-arthroplasty, and hip pinning with cannulated screws. The type of treatment for hip fracture is decided by factors such as patient's pre-fracture level of activity, the existence of arthritis, the patient's health, and ability to tolerate surgery. Hence, there is a need for the device that can ease the surgical procedure of the hip fractures.

Researchers at USF have developed a device as a substitution for hip pinning in a sedentary or a household-ambulating patient who has a hip fracture. This device works with commercially available instruments for hip arthroscopy and is a new type of balloon hip hemi-arthroplasty component that uses injection of bone cement. The advantages of this device are immediate fixation of the fracture, immediate weight bearing, and a procedure that is less invasive as compared to a hemi-arthroplasty. It prevents violation of the hip capsule and thereby reduces the risk of a hip fracture. This invention is applicable to the surgical field. It is specifically applicable to the area of hip surgeries as it provides a novel device for minimally invasive techniques for hip surgery.

ADVANTAGES:

- Less invasive
- Immediate fixation of the fracture
- Immediate weight bearing
- No violation of hip capsule with significantly less risk of fracture

Device For Minimally Invasive Hip Surgery



A Image of Common Portals for Hip Arthroscopy

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