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**Clinical experience in 10 patients implanted with a contralateral prophylactic medical device in case of first low-energy hip fracture due to osteoporosis**

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An innovative implant, Y-STRUT® (Hyprevention, France), was developed to provide prophylactic reinforcement of the proximal femur in patients suffering from a first hip fracture due to osteoporosis. We present our clinical experience on the first 10 patients implanted between February 2013 and December 2016. Prophylactic consolidations were performed under the same anesthesia of a hip fracture surgical treatment in the opposite side for patients at high risk of contralateral fracture. A multicenter prospective pilot study is ongoing on a planned cohort of 15 osteoporotic patients. Mid-term tolerance and safety of the studied device are assessed with several criteria, such as walking recovery, pain, radiographic control and adverse events. Clinical efficacy is evaluated through the occurrence of fractures. Ten elderly patients (mean 82±7 yrs.) were implanted because of a severe osteoporosis (mean T-score -3.64±0.8) resulting in first hip fractures. Follow-up ranges from 4 to 46 months and in all patients, wound healing was achieved, with no case of wound infection, bleeding, or inflammation. Radiographic exams performed at 3-month-follow-up revealed that the device was well integrated in the bone. No hospitalization lengthening was needed and all patients recovered walking and no pain was reported at 3 weeks (mean VAS was 0.9±0.7). Several post-operative falls were reported and no post-operative fracture was observed. Preliminary results from this study demonstrated the tolerance and safety as well as the short-term clinical efficacy of the studied device. Additional data need to be recorded on a greater number of subjects and longer follow-up to confirm the clinical benefits of Y-STRUT® implantation.

**Biography**

Szpalski Marek is the President of the Orthopedic Surgery and Traumatology Department at Iris South Teaching Hospital/ Moliere Longchamp in Brussels (Belgium). He is a Professor of Orthopedic at Libre University of Brussels and Professor of Orthopedic at New York University. He is Co-Inventor of the study device, Y-STRUT®.

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