

# Comparison of INSORB<sup>®</sup> Subcuticular Skin Staples and Autosuture<sup>™</sup> Signet<sup>™</sup> Skin Staples in the Closure of Total Hip Arthroplasty Wounds

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## **Abstract**

**Introduction:** Wound closure following orthopaedic surgery is an important step requiring careful technique and suitable suture material. The use of subcuticular sutures has been advocated following use in animal models and has also been reported in the literature having been used in specialities such as Orthopaedic Surgery, Plastic Surgery and Obstetrics.

**Aims:** The aim of this study is to assess the use of absorbable subcuticular INSORB<sup>®</sup> sutures in THR when compared with the standard Autosuture<sup>™</sup> Signet<sup>™</sup> metal skin staples. Patient satisfaction with wound appearance was measured at the six week review stage.

**Methods:** A Randomised Control Trial of patients undergoing Primary Total Hip Arthroplasty (THR) was undertaken. Parameters measured included wound length, time taken for staple insertion, GP appointment for suture removal and patient satisfaction with wound appearance at 6 weeks post-operation. No exclusion criteria were applied in terms of the age, medical history, thromboembolic prophylaxis therapy or type of hip prosthesis.

**Results:** 50 patients were recruited for this study. 25 patients had their wounds closed with INSORB<sup>®</sup> sutures and 25 patients had their wounds closed with skin staples. Wound healing was satisfactory at six weeks post operation. All patients in both groups described themselves as being satisfied or very satisfied with their wounds post-operation.

**Conclusion:** INSORB<sup>®</sup> subcuticular skin staples act as an adequate method of skin closure in primary hip arthroplasty. They also provide an excellent cosmetic result and high levels of patient satisfaction.