MySpine® S2AI

PERSONALIZED SACROPELVIC FIXATION

UNIQUE ANATOMIES PATIENT-MATCHED SOLUTIONS

Brochure

Joint | **Spine** | Sports Med

S2-ALAR/ALAR-ILIAC

Medacta International

S2-ALAR-ILIAC TECHNIQUE

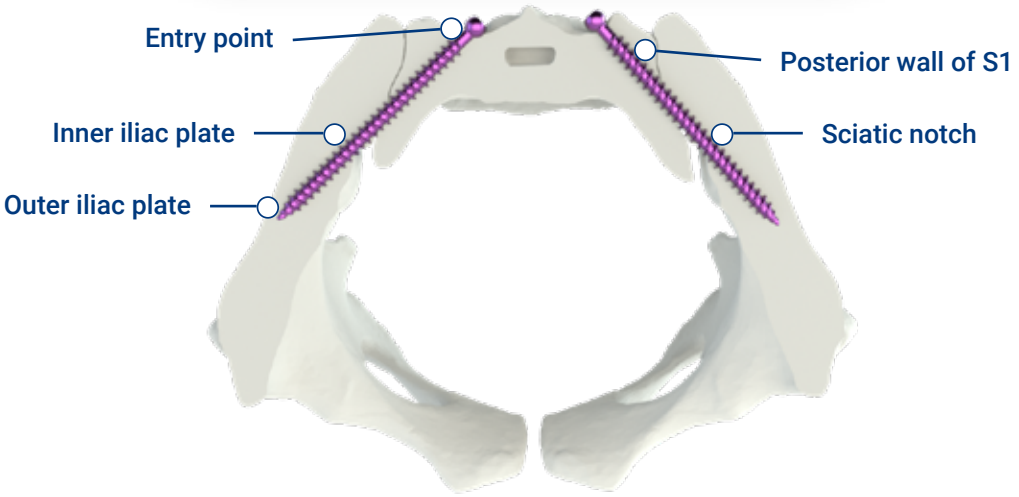
MySpine S2AI is the Medacta Patient-Specific Solution for **S2-Alar-Iliac fixation**: a **minimally invasive** solution at surgeon's hand for long constructs, designed to overcome the limits of a potentially insufficient lower spine fixation.

The S2-Alar-Iliac technique represents a valid solution since the trajectory crosses 5 cortical bone structures, resulting in a **strong bone fixation**, while the medial entry points **reduce** the need of **muscle dissection** leading to[5]:

- **Reduced screw loosening rate[5]***
- **Lower incidence of Sacro-Iliac Joint pain[5]***
- **Small incision[5]**
- **Less dissection[5]***

**compared with alternative lumbosacral instrumentations (S2-Alar and Iliac screws)*

5 CORTICAL BONE POINT FIXATION



Prominent conventional **Iliac screws** may lead to **irritation** and **pain** with **high revision rate.**[2,5]

MYSPINE IS DIFFERENT!

MySpine guided **S2-Alar-Iliac** trajectory may allow for a **small incision** and **less lateral retraction**, and the medial entry point allows for a **quick rod connection**, thus eliminating the need for additional connectors.[5]

PATIENT-MATCHED SOLUTIONS

MYSPINE S2AI VALUE PROPOSITION

MySpine is a **personalized surgical platform** that is **cost effective, efficient** and **intuitive**. MySpine provides pre-op planning, single-use patient-specific drill guides and intra-operative surgical plan.

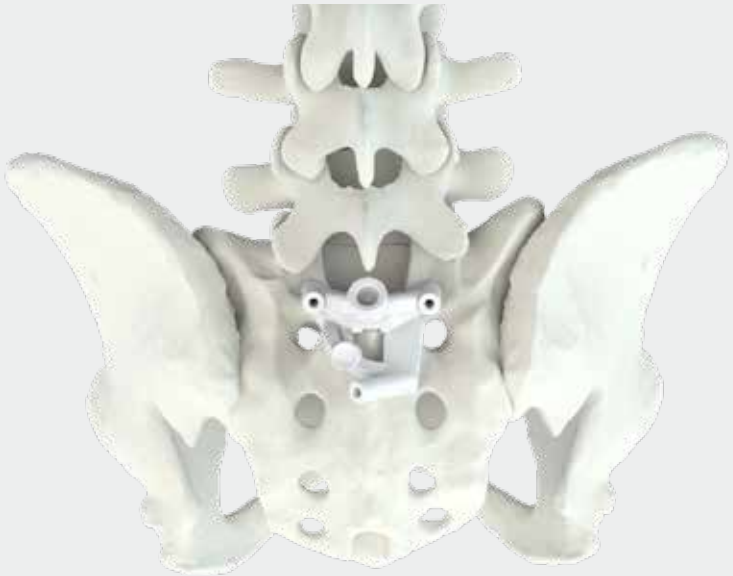
MySpine S2AI Pre-Op Plan

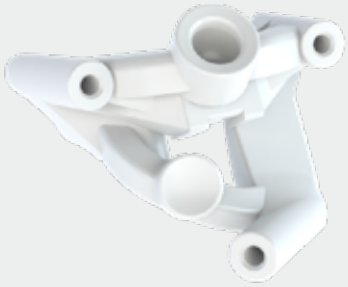
MySpine S2AI 3D Planning

MySpine S2AI can be used in those treatments where **strong bone fixation** is required, as it may provide[1]:

- Robust bone anchor and improved pelvic tilt correction in **Adult Spine Deformity**
- Spine balance recovery in rigid neuromuscular **Adolescent Idiopathic Scoliosis**
- Added value in fixing **fractured segments**

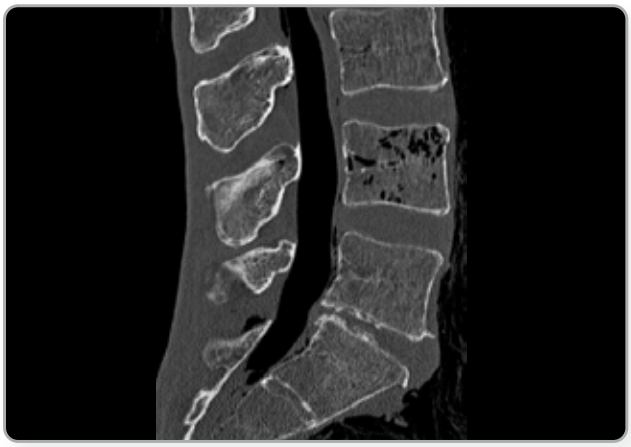
The guided technique leads to **precise screw placement**, comparable to that offered by gold standard navigation tools, while **reducing the radiation exposure and the surgical time.**[3,4]





- **HIGH ACCURACY**
- **LOW X-RAY RADIATION DOSE**
- **LOW PROFILE**

THE MYSPINE JOURNEY



1. IMAGE ACQUISITION

Low Dose CT scan to deliver 3D reconstructed vertebrae and the pelvic region

2. 3D PRE-OP PLAN MANAGEMENT

The surgeon defines optimal implant parameters

3. 3D PRINTING

Patient-matched Jigs are sent to the hospital

4. PROCTORED SURGERY

An experienced surgeon will support you during your first cases

REFERENCES

[1] Sponseller P. et al., "Low Profile Pelvic Fixation With the Sacral Alar Iliac Technique in the Pediatric Population Improves Results at Two-Year Minimum Follow-up", Spine, September 15, 2010
[2] Emami A. et al., "Outcome and Complications of Long Fusions to the Sacrum in Adult Spine Deformity: Luque-Galveston, Combined Iliac and Sacral Screws, and Sacral Fixation", Spine, April 1, 2002
[3] Matsukawa K. et al., Accuracy of cortical bone trajectory screw placement using patient-specific template guide system, Neurosurgical Review, July 2019
[4] Matsukawa K. et al., Cortical pedicle screw trajectory technique using 3D printed patient-specific-guide, M.O.R.E. Journal, September 2018
[5] Krieg S. et al., "Revision by S2-alar-iliac instrumentation reduces caudal screw loosening while improving sacroiliac joint pain—a group comparison", Neurosurgical Review, September 2020 study

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