

Porous titanium wedges in children and adolescents

Short and mid-term results

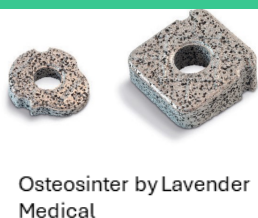
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RATIONALE AND PATIENTS

Porous titanium wedges are routinely used in adult F&A surgery
Series includes 32 feet in 26 patients (6 bilateral)
Mean age at surgery 13.2 (7.3-25)
18 planus-planovalgus/10 cavus-cavovarus
4 complex deformities
Mean follow up 12.4 months (3.1-22)

SURGERY AND METHODS

Implants used for lateral column lengthening, Cotton or plantar medial opening wedge
Associated with multiple soft tissue and bony procedures
4 radiological measures compared pre and postoperatively



paired t planus	mean	std d	sig
kite pre/post	7.2	15.3	0.03
ccab pre/post	18.6	10.4	0.01
meary pre/post	-13.8	9.1	0.01
pitch pre/post	-15.2	9.6	0.01

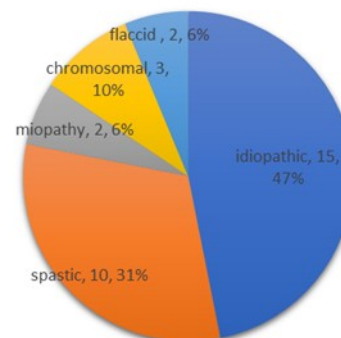


COMPLICATIONS

- 1 superficial wound infection (medial non implant side)
- 1 lateral pain (CCJ degeneration -picture-)



DIAGNOSIS



RESULTS



paired t cavus	mean	std d	sig
kite pre/post	5.4	20.9	0.4
ccab pre/post	-12.4	19.1	0.06
meary pre/post	7.5	6.7	0.01
pitch pre/post	5	5.7	0.01

CONCLUSIONS

- Correction comparable to graft/plate and screws
- Time saving during surgery
- No donor site morbidity
- Low profile, no metalwork irritation
- Early weight bearing
- Patient satisfaction

Matthews M, Cook EA, Cook J, Johnson L, Karthas T, Collier B, Hansen D, Manning E, McKenna B, Basile P. Long-Term Outcomes of Corrective Osteotomies Using Porous Titanium Wedges for Flexible Flatfoot Deformity Correction. J Foot Ankle Surg. 2018 Sep-Oct;57(5):924-93
Fraser TW, Kadakia AR, Doty JF. Complications and Early Radiographic Outcomes of Flatfoot Deformity Correction With Metallic Midfoot Opening Wedge Implants. Foot Ankle Orthop. 2019 Sep 11;4(3)