Regarding “Arthroscopic Posterior Subtalar Arthrodesis: Surgical Technique”

We read with great interest the recent article by Vilá y Rico et al. 1 entitled “Arthroscopic Posterior Subtalar Arthrodesis: Surgical Technique,” published in the February 2016 issue of Arthroscopy Techniques. Vilá y Rico et al. presented the technique 1 and their results 2 of arthroscopic posterior subtalar arthrodesis for treating adult-acquired flatfoot deformity or post-traumatic arthritis, which were treated as salvage operations after unsuccessful initial treatment. We congratulate the authors for their excellent results and their detailed description of the surgical technique.

We would like to add a further potential indication for arthroscopic posterior subtalar arthrodesis, adding only two modifications to the original technique of Vilá y Rico et al. 1,2 This technique 1 could be used to treat Sanders type IV fractures of the calcaneus. 3 Primary arthrodesis of Sanders type IV calcaneal fractures is widely accepted 4,5 ; arthroscopic arthrodesis is associated with less soft-tissue damage, respecting the vascularization, which could promote fusion. 1,2

We perform the operation 7 to 10 days after the fracture. The surgical procedure consists of arthroscopic subtalar arthrodesis using posterior endoscopic portals following a similar technique to that originally described by van Dijk et al. 6; the joint is debrided from posterolateral to posteromedial and from anterolateral to anteromedial, until subchondral bone is visible on both aspects of the complete subtalar joint surface as described by Vilá y Rico et al. 1 At this moment (after preparation of the joint surfaces and before the arthrodesis stabilization), the first modification is achieved: A Steinmann pin is introduced percutaneously from the medial to lateral side of the posterior tuberosity of the calcaneus. The Steinmann pin is maneuvered as a joystick to re-establish the length and height of the calcaneus and to reduce its varus/valgus. Once the calcaneus is in the right position, the arthrodesis is stabilized with two 7-mm cannulated screws at the most anterior aspect of the joint, from the calcaneus to the talus, similar to the description of Vilá y Rico et al. 1 The second modification consists of the use of fully threaded cannulated screws. Less compression is achieved by using these kinds of screws, and their use avoids decreasing the height and length of the calcaneus, which is a possible consequence if too much compression occurs in this type of comminuted fracture.

With these two simple modifications, the indication for this surgical technique could be extended to primary arthrodesis of Sanders type IV fractures of the calcaneus.

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Note: The authors report that they have no conflicts of interest in the authorship and publication of this letter.

References

Authors’ Reply

We appreciate your comments and insights regarding our paper describing our technique for arthroscopic...