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Response to "Letter Regarding: Cost of Headless vs Headed Screw Fixation for Calcaneal Osteotomy and Subtalar Arthrodesis"

Dear Editor:

We would like to thank you for the opportunity to respond to the questions raised about our recent article "Cost of Headless vs Headed Screw Fixation for Calcaneal Osteotomy and Subtalar Arthrodesis."[1] We would also like to thank those who took an interest in our article and for taking the time to express their concerns.

In this letter to the editor, a request for further detailing of the rate of nonunion following fixation in specifically the subtalar arthrodesis group is inquired. The rate of nonunion was a secondary outcome we analyzed. As previously stated, 100% of calcaneal osteotomies went onto union and there was no statistical difference in nonunion rates between the headless and headed screw groups in patients who underwent subtalar arthrodesis. On further review of the data, a total of 54 patients underwent subtalar arthrodesis, 32 with headless screw fixation and 22 with headed screw fixation. In the headless screw group 3 of the 32 patients went onto nonunion, accounting for 9% of patients. In the headed screw group, 2 of the 22 patients went onto union accounting for 9% of patients. There was no statistical difference between the two groups. For the entire group of patients undergoing subtalar arthrodesis, our nonunion rate was approximately 18%, which is consistent with the current nonunion rate reported in the literature that ranges from 16% to 23%.[2-4]

Second, the letter inquires further details of how many patients were assessed by radiographic methods or computed tomography (CT) scan to evaluate for union. Of the 130 patients included in the study, 55 patients were evaluated by radiographic findings alone, and 75 patients or 57% received a CT scan to assess for union. The authors recognize that this may be a potential weakness. Based on a recent study by Myerson et al,[5] brought forth by the inquirer, radiographic fusion rates can be up to 30% higher than CT-assessed fusion rates.[5] Nonetheless, the nonunion rates were similar between each group and consistent with the current literature.

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