

Introduction

Foot and ankle arthrodesis is a common procedure performed to relieve pain and improve function in patients with various foot and ankle conditions. The choice of bone graft material is a critical factor in the success of the procedure. Two cellular bone allografts, the *Allograft* and the *Allograft*, are commonly used for this purpose. The *Allograft* is a cancellous bone graft, while the *Allograft* is a cortical bone graft. Both allografts are processed to reduce the risk of disease transmission and are available in various sizes and shapes to fit the surgical site.

The purpose of this study was to compare the clinical and patient-reported outcomes of foot and ankle arthrodesis procedures using the *Allograft* and the *Allograft*. The study was a retrospective analysis of 100 patients who underwent arthrodesis procedures between 2010 and 2015. The patients were divided into two groups: 50 patients who received the *Allograft* and 50 patients who received the *Allograft*. The primary outcome was the rate of union, and the secondary outcomes were the rate of complications, the time to union, and the patient-reported outcomes.

Methods

The study was a retrospective analysis of 100 patients who underwent arthrodesis procedures between 2010 and 2015. The patients were divided into two groups: 50 patients who received the *Allograft* and 50 patients who received the *Allograft*. The primary outcome was the rate of union, and the secondary outcomes were the rate of complications, the time to union, and the patient-reported outcomes.

The patients were included in the study if they had a confirmed diagnosis of foot or ankle arthritis, a failed non-operative treatment, and a need for arthrodesis. The patients were excluded if they had a contraindication to surgery, a history of smoking, or a history of drug abuse. The patients were followed up for a minimum of 12 months postoperatively. The primary outcome was the rate of union, defined as the presence of bridging bone on plain radiographs. The secondary outcomes were the rate of complications, defined as the presence of infection, nonunion, or hardware failure. The time to union was defined as the time from surgery to the date of union. The patient-reported outcomes were measured using the Foot and Ankle Disability Index (FADI) and the Foot and Ankle Pain Scale (FAPS).

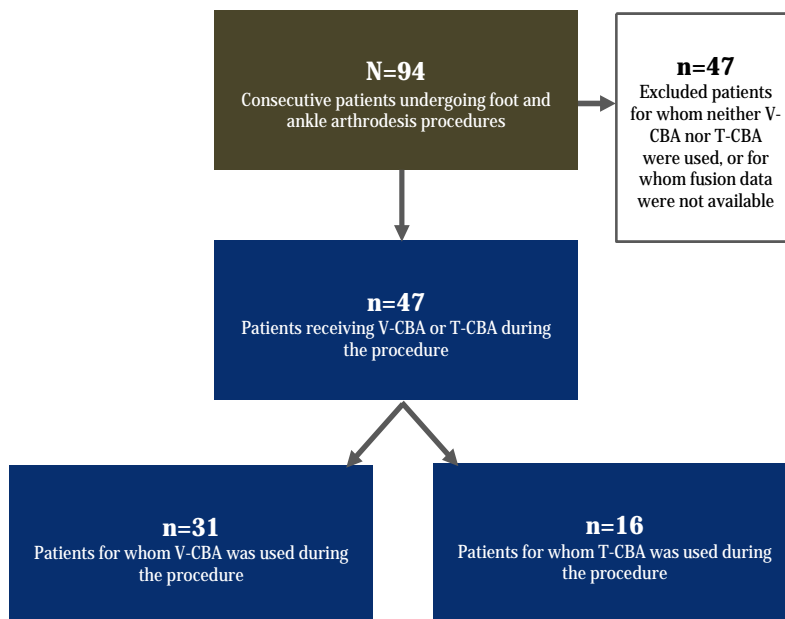


Figure 1: Flowchart illustrating the patient selection process. N=94 consecutive patients undergoing foot and ankle arthrodesis procedures. n=47 patients were excluded for whom neither V-CBA nor T-CBA were used, or for whom fusion data were not available. n=47 patients received V-CBA or T-CBA during the procedure. n=31 patients used V-CBA, and n=16 patients used T-CBA.

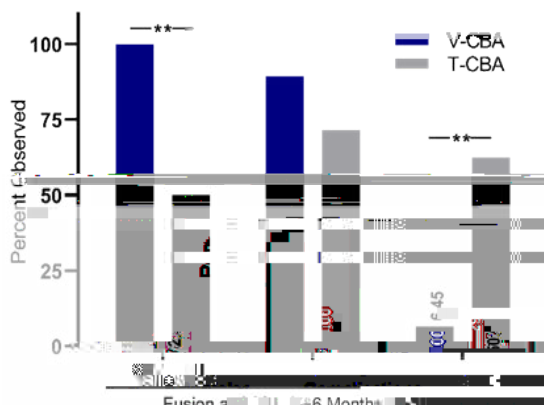


Figure 2: Bar chart showing Percent Observed vs Fusion at 6 Months for V-CBA and T-CBA groups. V-CBA shows significantly higher fusion rates compared to T-CBA at 6 months.

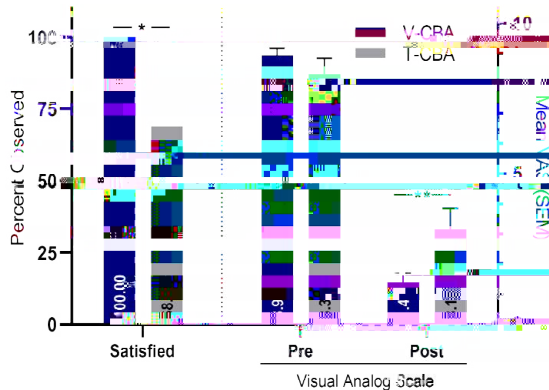
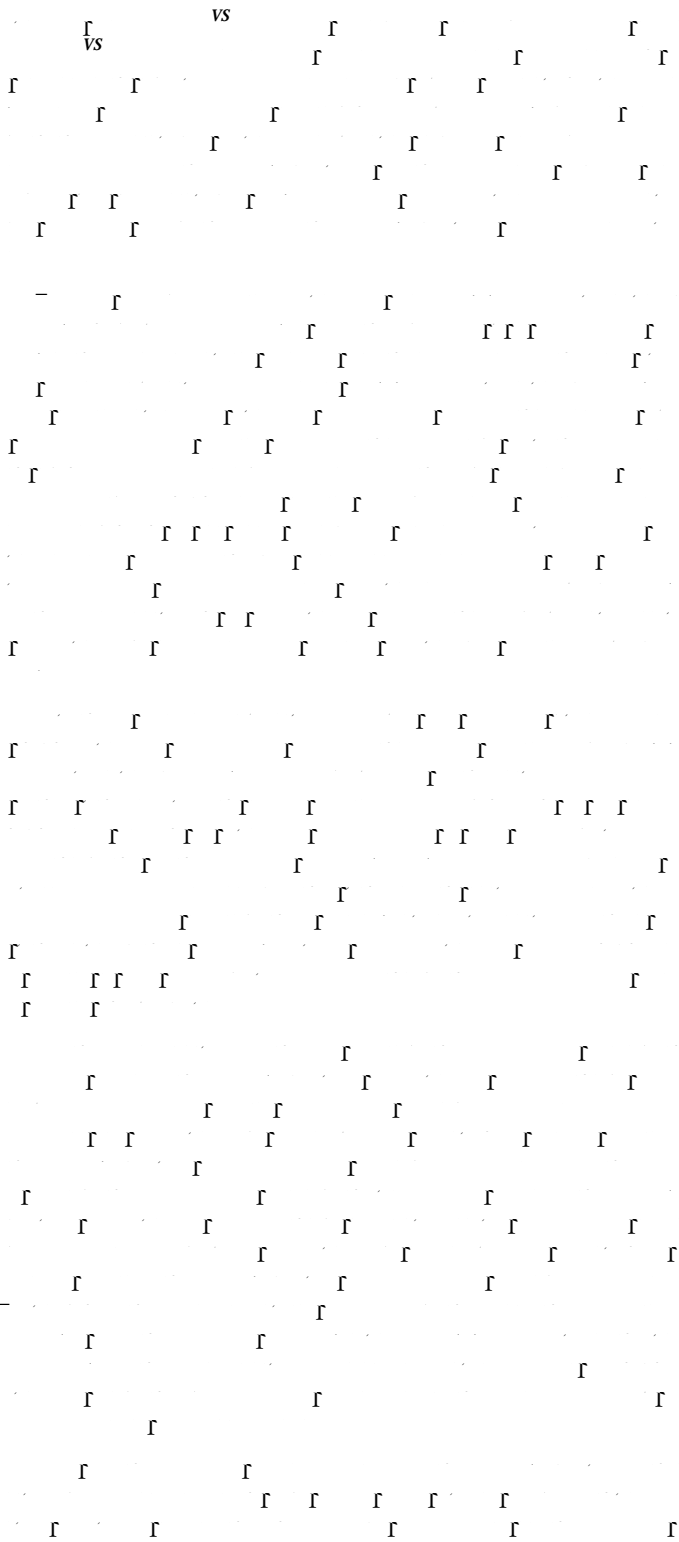


Figure 3: Stacked bar chart showing Percent Observed vs Visual Analog Scale (Satisfied, Pre, Post) for V-CBA and T-CBA groups. V-CBA shows significantly higher patient satisfaction compared to T-CBA.

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