Arthrodesis can be used to manage a range of deformities and to treat degenerative and inflammatory changes of the joint. The most significant complication is non-union, but chronic pain due to complex regional pain syndrome, or progressive arthritic changes can also occur. The aim was to evaluate the outcome of different methods of fixation used for TN arthrodesis in adults within the trust.

**Method:** This was a quality improvement project, looking retrospectively at inpatient surgeries over a 6-year period. Inpatient notes, operative notes, clinic letters and imaging were analysed. Treatment methods included IOFIX devices, cannulated screws, staples, plates and screws, and combined staples and screws. The sample included a total of 57 patients (42 females and 15 males).

**Results:** IOFIX had a 93% fusion rate, and a 27% complication rate. Cannulated screws had a 79% fusion rate, and a 46% complication rate. Screws and staples had a 75% union rate, and a 13% complication rate. Only one sample used plates and screws, which resulted in union and no complications. Using staples alone had a 78% union rate and a 11% complication rate.

**Conclusions:** The greatest union rate was achieved with IOFIX devices, followed by cannulated screws. Greatest complication rate was with cannulated screws, and lowest with the combined use of staples and screws. Highest rate of revision surgery was with cannulated screws. Recommendations included a switch to IOFIX devices for TN arthrodesis.

## 1170 Outcome of Various Fixation Techniques for Talo-Navicular Arthrodesis

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Aim: The talonavicular (TN) forms part of the medial joint complex, which is involved in maintaining stability during the gait cycle