This new study from the University of Iowa reports the long-term results of ankle replacement surgery. The Agility total ankle replacement was used in 126 patients. An earlier report by these same authors gave the short-term results using this same implant.

All patients had disabling ankle arthritis. About half the arthritis occurred because of trauma. Others had osteoarthritis, rheumatoid arthritis, or joint infection resulting in arthritis. Nonsurgical treatment didn't work, so surgery was the next step.

Patients were followed for at least seven years. Some were followed for up to 16 years. Pain, function, and patient satisfaction were measured. X-rays were used to see the joint and the placement of the implant. X-rays also showed the condition of the bone. Doctors looked for bone loss around the joint implant and signs of arthritis.

The authors report a 90 percent rate of patient satisfaction. About 11 percent of patients needed a second operation to revise or remove the implant. Some of these patients had to have the joint fused. Implants failed because of bone loosening or the implant settling too far into the bone. Infection and fracture accounted for other implant revisions.

Early attempts at ankle replacement had many problems. As better implants were developed results seemed to improve. This report shows encouraging results with the Agility implant over an average of nine years.