Thursday: Achilles: 9:03 – 9:05 am

Achilles Tendon Rupture in Women

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Summary
Achilles tendon ruptures in women have not specifically been addressed in the literature. We reviewed all Achilles tendon ruptures treated by seven foot and ankle surgeons since the inception of their respective practices. There were a total of 357 acute ruptures; the male-to-female ratio was 5.49:1. The two most common causes of rupture in men were basketball and tennis, while in women the two most common causes were tennis and dance.

Introduction
The incidence of Achilles tendon rupture certainly appears to be less in women, although this fact has not been specifically queried in the literature. Several papers have looked at Achilles tendon ruptures in a given population and have reported on a male-to-female ratio. However, none have studied the injury in females specifically to try to establish demographics and potential precipitating factors. Moreover, no study has specifically looked at the incidence of Achilles tendon rupture in the general population in the United States. It is our goal to define a male-to-female ratio and look for any trends in terms of age and mechanism of injury.

Methods
The records of seven foot and ankle fellowship trained orthopaedists at one institution were reviewed by CPT (27650) and ICD-9 codes (727.67) in an effort to ascertain all Achilles tendon ruptures seen and/or treated by those surgeons since they have been in practice. The charts were reviewed to confirm Achilles tendon rupture, as well as cull out demographic and injury information on the patients. Any patient who had an Achilles tendon rupture and was seen or treated by one the surgeons was included. Data recorded included sex, age, side, and mechanism of injury. Any comorbidities that were felt to increase the risk of rupture and were included in the chart were also noted.

Results
A total of 357 acute ruptures were found. Of these acute ruptures, 302 were in males, and 55 were in females (5.49/1). In the acute ruptures as a whole, the average age was 43.8 years. The average age for male patients with acute ruptures was 43.9 years, while for the female patients with acute ruptures the average age was 43.2 years. Some kind of sporting activity was involved in 252 of the acute ruptures (252/357, or 70.6%). The individual sports that accounted for the greatest number of ruptures were basketball (21.3%) and tennis (19.3%). For the female patients sporting activity was involved in 31 of the acute ruptures (31/55, or 56.4%). For the male patients sporting activity was causative in 223 of the acute ruptures (221/302, or 73.2%).

Conclusions
Achilles tendon rupture is more common in men than women. The differences in mechanism of injury are most likely a representation of the different activities in which men and women engage.