

## XII. Traumatology Section.

## **1. ACUTE ACHILLES TENDON RUPTURE: PERCUTANEOUS TENORRHAPHY**

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**Introduction.** Acute injury of Achilles tendon represents 20% from large tendon ruptures and the incidence is 11-37 per 100 thousand people (by Park et al. 2020).

**Case presentation**. A 43-year-old man, after a sprint, heard a crack and a sharp pain in his right ankle, on the posterior part a day ago. He went directly to the Clinical Hospital of Traumatology and Orthopedics. He was clinically examined where it was determined swelling of the ankle region and 1/3 of the lower back of the right leg, erasing the Achilian contour, the foot is moved sideways. Palpation of the Achilles tendon diastase. Thomson sign - positive on the right. The sonographic examination determined the Achilles tendon tears with a diastase of 4 cm. The patient was recommended surgery to repair the rupture of the Achilles tendon by percutaneous tenorrhaphy. An informed agreement was obtained after explication of the risks and benefits of the surgical treatment. Surgery was made with spinal anesthesia and fixing sterile zone, the distal and proximal ends of the Achilles tendon were drawn with a sterile marker from the visually determined and palpable injury on the skin. Percutaneous sutures were applied after Cuneo in two rows at the proximal end and one row at the distal end, through two mini-incisions, the opposite ends were adapted on the lateral and medial edge, the foot in the equine (hyperflexion), thus the final ligation of the threads was achieved. Applying the dressing. The final step is followed by the application of the leg immobilization with the foot in the equine on the right. Simple evolution of the postoperative period. After 6 weeks of immobilization, the patient starts rehabilitation.

**Discussion.** Fresh Achilles tendon injury needs to be diagnosed primarily as early as possible, with the use of sonographic examination to confirm the clinical diagnosis allowing us to perform minimally invasive treatment such as percutaneous tenorrhaphy.

**Conclusion.** Achilles tendon is the largest and strongest tendon of the human body and its usual injury is caused by recreational activity. Early establishing the diagnosis of Achilles tendon injury permitted primary repairing this anatomical structure by minimally invasive technique.

