

## V-Y LENGTHENING FOR TREATMENT OF CHRONIC ACHILLES TENDON RUPTURE

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**Introduction:** Achilles tendon is a largest tendon in body which receive blood supply from posterior tibial artery(1). It provides ankle plantar flexion strength and function. The achilles tendon is the most commonly ruptured tendons of lower extremity. Chronic Achilles tendon rupture is usually defined as rupture that present 4-6weeks post trauma(2). The symptoms include pain, weakness and ankle stiffness.

**Discussion:** Our patient is a 50-year-old female teacher presented to our clinic because of back pain, and left lower limb weakness Incidental findings during examination, gap can be felt at Achilles tendon region and patient failed to perform standing on tiptoes. Besides that, Thompson test shows positive sign and patient unable to do plantar-flexion. Plain radiographs are obtained, noted no abnormalities of the ankle joints, however noted disruption of the kager triangle from left ankle xrays. V-Y lengthening technique was used in this case, where inverted V shaped incision made over the gastrocnemius fascia but leave the underlying soleus muscle intact. It will provide length for end-to-end achilles tendon apposition and prevent disruption of blood supply to the whole reconstruction.(3) Next, ankle will be position in full plantar flexion to connect and oppose the ruptured end together. While the proximal V-Y gap then sutured using non-absorbable suture in Y shape manner. Post operative, below knee backslab applied with ankle in plantar-flexed position. This is to avoid overlengthening and re-rupture of the achilles tendon from happening. After 6 weeks post operative, backslab was removed and patient is allowed to weight bear. Patient was referred to physiotherapy for ankle strengthening and ankle range of movement exercise.

**Conclusion:** V-Y lengthening is one from so many techniques to repair achilles tendon rupture. It can help to achieve end-to-end achilles tendon apposition. This technique requires proper planning and good surgeon to accomplish good functional outcome.