



Vicryl or Ethibond for open Surgical Achilles Tendon Repair

Makgabo John Tladi*

FCS ortho and MMED ortho, Louis Pasteur Hospital, South Africa

***Corresponding author:** Makgabo John Tladi, FCS ortho and MMED ortho, Louis Pasteur Hospital, Pretoria, South Africa

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Mini Review

The strongest tendon in the body is the Achilles tendon. Acute tendon rupture can occur and is found most commonly in males. Management of rupture can be conservative or surgical. Surgical management is often associated with wound complications that can occur early or later. By contrast, conservative management is associated with a higher rate of re-rupture. Various suturing open techniques have been reported [1]. Krakow, Kessler and Bunnell suture techniques are commonly used [1,2]. Cadaveric study has shown that the three techniques have no strength differences [3]. The surgeon should be aware of the risk of developing wound complications. Bruggeman et al. have reported that females, tobacco use, and steroid use are risk factors for developing wound complications following open Achilles tendon repair [4]. Nonathletic patients tend to have poor outcomes following Achilles tendon surgery because of a higher body mass index, greater calf circumference, smoking, and greater subcutaneous body fat than athletic patients[5]. The surgeon is often the one who chooses which material to use to suture the tendon. This selection could be based on experience or on how the surgeon was taught. Suture materials can be divided into absorbable and non-absorbable. The absorbable suture commonly used in orthopaedics is vicryl, while ethibond and fibre wire are non-absorbable [6]. The reasons why surgeons use a non-absorbable suture include a higher knot and suture security and holding resistance, and also a belief that this type of suture is stronger [7]. But in biochemical test, it has been found that there was no knot slippage for either type of suture [6]. Kocaoglu et al. reported comparable clinical scores for both suture types, however, the non-absorbable had higher complication rates following Achilles tendon repair. Common complications for a non-absorbable suture include delayed wound healing, wound dehiscence, and at a later stage granulation formation which can

present as a chronic sinus [7, 8, 9]. Patients may then require oral antibiotics or surgical debridement that involves removal of the non-absorbable material. When surgically treating Achilles tendon rupture, the absorbable suture material can be used.

Ethical Approval

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Data Availability

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Transparency Declarations

The author declares that there is no conflict of interest.

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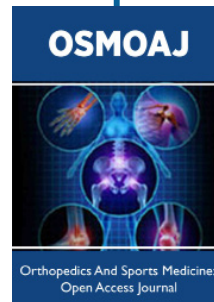
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