Product

The Tendon Anchor System is a toothed titanium implant designed for reattachment of soft tissue to bone. The system provides far greater surface compression than is possible with traditional reattachment techniques while reducing OR time.

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Indications & Contraindications

**Indications for use:**

The BioPro® Tendon Anchor System is indicated for use for soft tissue to bone fixation in the foot, ankle, knee, hip, hand, wrist, elbow, and shoulder. The BioPro Tendon Anchor System is supplied sterile and intended for ‘single-use’ only.

**Contraindications:**

1. A general health problem that might pose a significant threat to the life of the patient if subjected to a major surgical procedure.
2. An active infection or a previous infection of the lower extremity that has not been quiescent for at least six months.
3. A local or systemic infection.
4. Significant deficiency in the vascular supply to the extremity.
5. Severe structural deficiency of the sub-chondral bone that may result in insufficient support for the device.
6. It is not intended for use in the spine.

**Possible applications**

- Haglund’s Deformity
- Kidner Procedure
- Jones Procedure
- Young’s Tenosuspension
- Hibbs Procedure
- Lateral Ankle Stabilization

**Caution**

This implant should not be used in patients with a known sensitivity to titanium. Use of longer screws could result in irritation and violation of adjacent joint spaces resulting in pain and discomfort.
Implant Specifications

The BioPro Tendon Anchor System is designed for reattachment of soft tissue to bone.

The Tendon Anchor System is available in both 10mm (one hole) and 26mm (two hole) designs.

The Tendon Anchor System incorporates several unique features that allow for improved pull-out strength while addressing concerns of previous spiked anchors.

The anchor is fixated with included Ø3.0mm solid cancellous bone screw(s). Both 15mm and 20mm screws are included in the sterile package.

The self drilling/ self tapping design of the screws requires no predrilling and allows for manual insertion.
Implant Specifications

The 26mm design features five holes (Fig 1).

1. The larger holes are recessed for the screws. These holes are oval shaped to allow 1mm of freedom while maintaining a flush screw to anchor interface. (Fig 2).
2. The top holes are designed for sutures. Sutures can be used in conjunction with the implant for additional support.
3. The middle hole accepts the temporary olive wire to hold the implant in place during implantation.

The 10mm design features an oval screw hole that will allow the included Ø3.0mm screws 1mm of freedom while maintaining a flush screw to anchor interface.
Instrument Specifications

A disposable T-7 driver is included with both anchors.

The 26mm Tendon Anchor System (ref 20159) includes an olive wire for temporary fixation of the anchor to bone.

The 10mm Tendon Anchor System (ref 20070) includes a holder which is preloaded with the anchor. The holder facilitates anchor placement and allows for easy screw insertion.
Packaging Specifications

The Tendon Anchor System is delivered in sterile packages and includes the anchor, screws and all the instruments needed to implant the system. This approach simplifies inventory and ensures the facility has everything needed to implant the device. This also reduces processing time and cost, eliminating the need for sterile processing of an instrument kit.

The 10mm Tendon Anchor System (ref 20070) includes the anchor, an insertion holder, two Ø3.0mm screws [ (1) 15mm and (1) 20mm], and a disposable screwdriver.

The 26mm Tendon Anchor System (ref 20159) includes the anchor, an olive wire for temporary fixation during implantation, four Ø3.0mm screws [ (2) 15mm and (2) 20mm], and a disposable screwdriver.
Surgical Technique

10mm Anchor

**Step One:**

Use preferred technique to expose tendon of interest. If tendon transfer is being performed, detach as needed.

**Step Two:**

Next, re-approximate the tendon at the desired tension. The preloaded holder with the 10mm anchor is then placed onto the tendon (Fig 3).

**Step Three:**

One Ø3.0mm self-drilling, self-tapping screw is inserted through the holder (Fig 4). The screw is then driven into the bone with the provided disposable T-7 screw driver. Care is taken not to over tighten the screws and risk stripping the bone.

**Note:**

The system includes a 15mm and 20mm screw. It is recommended to secure the anchor with the 15mm screw initially. If sufficient screw purchase cannot be attained, replace it with the 20mm screw.
Step Four:

The anchor should be at or below the surface of the tendon (Fig 5). The subcutaneous tissues and skin are closed per the surgeon’s preference.
The following steps detail a technique for the use of the 26mm Tendon Anchor System for reattaching the Achilles tendon. This technique may be applied to any soft tissue to bone application.

**Step One:**

Use preferred technique to expose the Achilles tendon.

When performing Haglund’s correction, care is taken to remove prominence and remodel the calcaneus (Fig 6).

Next, the Achilles tendon is re-approximated with a braided non-absorbable suture of choice. Care is taken to bury the suture knots.
Step Two:

Plantar flex the foot and pull down the Achilles tendon into the preferred position.

Place the anchor over the Achilles tendon. Insert the provided olive wire through the wire hole and drive into place, temporarily securing the anchor (Fig 8).

Step Three:

The anchor is now permanently secured with the provided Ø3.0mm self-drilling, self-tapping screws (Fig 9).

Care is taken not to over tighten the screws and risk stripping the bone.

Note:
It is advised to use an alternating technique when driving the screws into place. Begin by driving the first screw up to 80% depth, then repeat the same with the second screw. Complete fixation by tightening both screws down using a two-finger tightening method.

Note:
The system includes both 15mm and 20mm screws. It is recommended to secure the anchor with the 15mm screws initially. If sufficient screw purchase cannot be attained, replace them with the 20mm screws.
All temporary instrumentation is removed (Fig 10). The subcutaneous tissues and skin are closed per surgeon’s preference.

**Note:**
This technique involves using the 26mm anchor. If this anchor doesn’t fit the patient’s anatomy properly, use (2) 10mm anchors (Fig 11).
Suggested Postoperative Protocol

- Immediate post-op, patient is placed in a modified Jones compressive dressing and a non-weight bearing fiberglass posterior splint.

- First postoperative visit, post-op day four, the dressing is changed and incision is examined. Continue with the non-weight bearing posterior splint.

- Second postoperative visit, post-op day ten to twelve, a modified Jones compressive dressing as well as a walking boot are applied. Patient is allowed to bear weight as tolerated.

- Patient to remain in a walking boot for a total of four weeks.

- At four weeks post-op, patients are gradually weaned off the walking boot and may progress to regular shoe gear as tolerated. Physical therapy may be considered at this time.
## Ordering

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<th>Item #</th>
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<td>One Hole Tendon Anchor System</td>
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<tr>
<td>20159</td>
<td>Two Hole Tendon Anchor System</td>
<td>26MM</td>
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