

Docket #: S22-207

Soft tissue eyelet/grommet and passing/placement device

A Stanford inventor has developed a soft grommet/eyelet to load share and prevent suture pull-through of the repair stitch and a device to pass the eyelet.

Soft tissue tears, including ligament and tendon tears, are common injuries resulting from falls, over-exertion, and athletics, which may place excessive stress on soft tissues. Some of these injuries may heal on their own. However, complete tears often require surgical intervention to reattach the soft tissue to the bone. Soft tissue can be reattached to bone using screws, staples, suture anchors, and other devices. With current methods, like suture anchors, there is a risk of additional injury during or after the procedure if tension is applied to the tissue. Any subsequent damage to soft tissue hampers healing and necessitates further surgical interventions to repair the damage. It is, therefore, necessary to develop improved methods and devices for securing soft tissues to bone post-injury to prevent tearing.

Hence, a Stanford scientist and orthopedic surgeon developed a novel grommet/eyelet and a partner device to pass the eyelet, to anchor repair stitches, and reinforce suture passage through soft tissue. The invention improves load sharing in patients undergoing tendon repairs to prevent recurrent tears.

Stage of Development

Prototype

Applications

- Reinforcement of suture passage through soft tissue.
- Orthopedic tissue repair. Can be used for other types of tissue repair as well.

Advantages

- Prevent tear through failure of the repair sutures.
- Safe
- Efficient

Patents

- Published Application: [WO2023235278](#)

Innovators

- Joseph Donahue

Licensing Contact

Seth Rodgers

Licensing Manager, Life Sciences

[Email](#)