

Ulnar Collateral Ligament (UCL) Repair with Internal Brace

The early literature on UCL repair yielded less than satisfactory results. Dr Frank Jobe's early results of patients undergoing UCL repair had a 50% rate of return to the same level of play. This rate dropped to 29% in MLB players undergoing repair. Dr James Andrews' early results of UCL repair had a return-to-play rate of 63% compared to 81% in the UCL reconstruction group. Based on these results, UCL repair had been abandoned until recently.



Internal Brace: collagen coated fiber tape with suture anchors

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Improved technology and selective indications has renewed interest in UCL repair. Dr Buddy Savoie published promising results of his repair technique using only anchors in select patients, with 93% (56 of 60) of athletes returning to the same level of sport, 58 of whom returned within 6 months of surgery. This technique has been modified by Dr Jeffrey Dugas by the addition of collagen-coated suture tape. This augmentation acts as both a reinforcement to stress on the UCL and as a biologic augmentation for healing of the ligament.

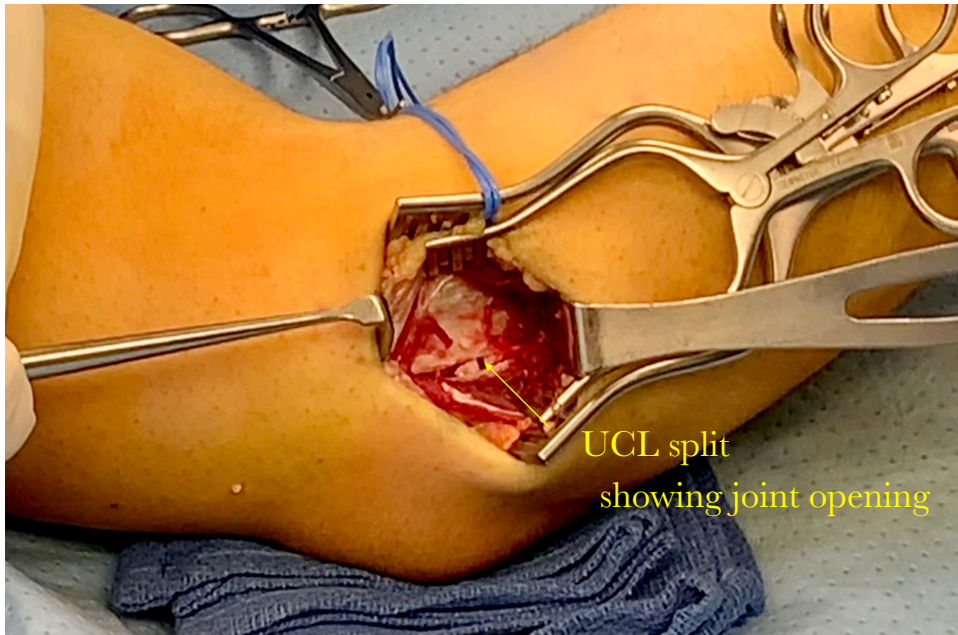
Dr Dugas and his group evaluated 111 overhead athletes in their study and found 92% (102/111) of those who desired to return to the same or higher level of competition were able to do so at a mean time of 6.7 months.

UCL Repair with Internal Brace Augmentation is indicated for select UCL injuries and not a good option for all UCL tears. The surgery is performed as an outpatient procedure. A small incision is made over the medial (inner) elbow.



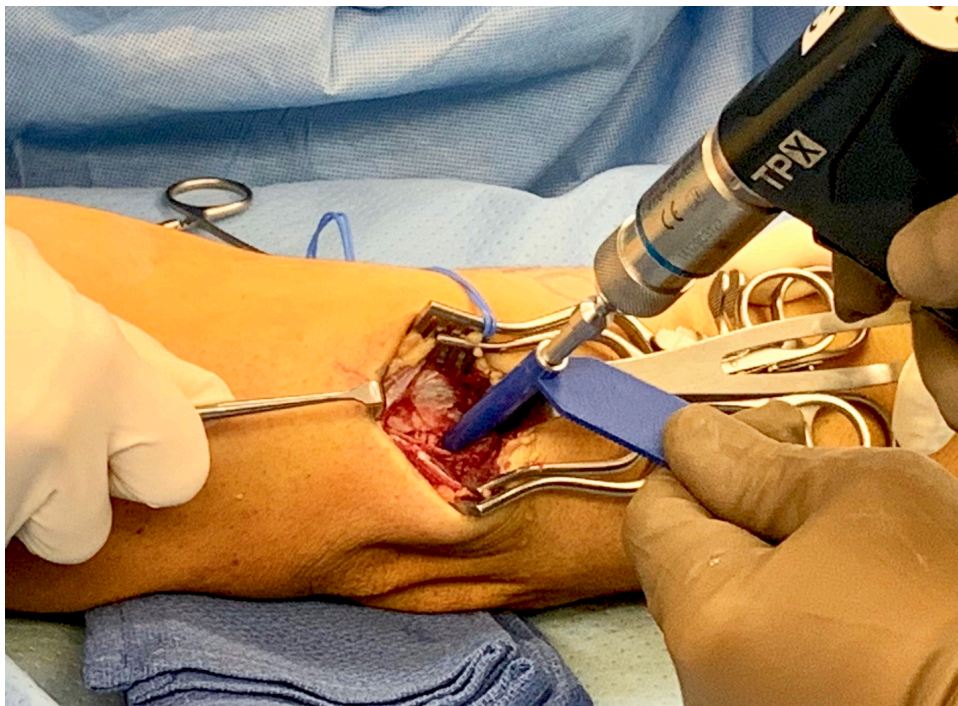
Incision for UCL Repair

A flexor muscle splitting approach is made to expose the UCL, the UCL tear is confirmed and the ligament is opened in line with its fibers to confirm laxity of the elbow.

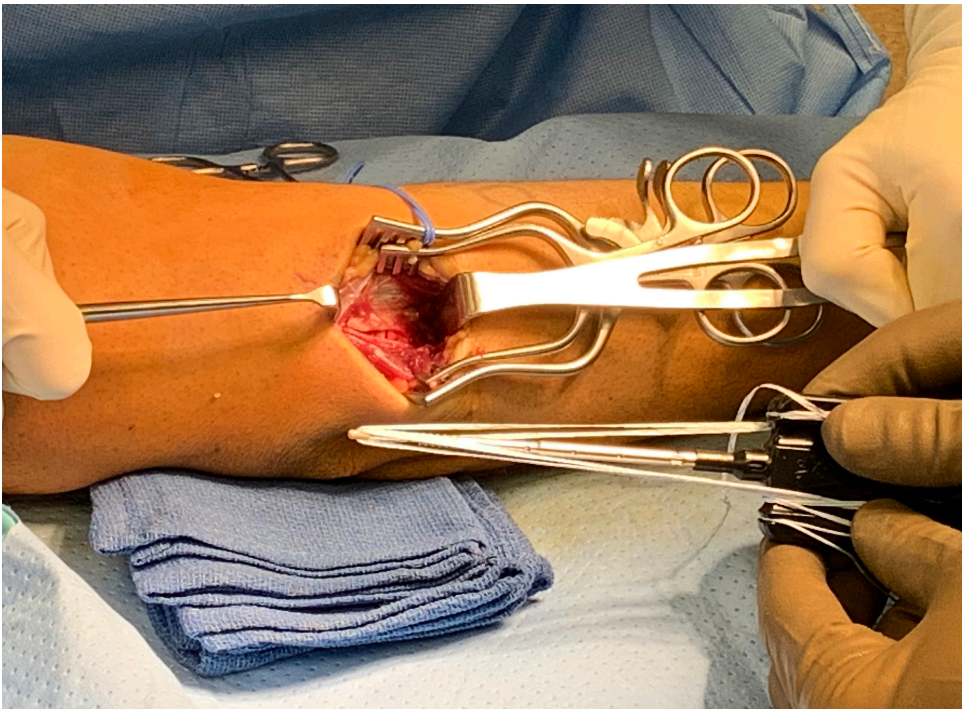


Excess joint opening when UCL is incised in line with its fibers

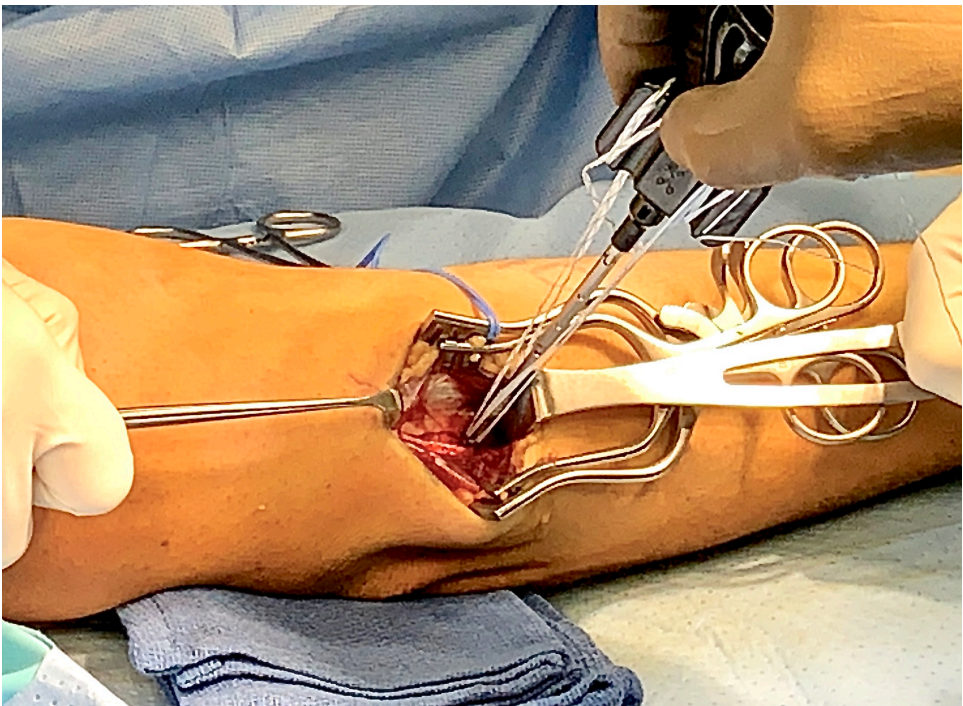
A suture anchor is placed at the site of the UCL tear and the ligament is repaired to its attachment on the bone.



A drill hole is made at the UCL attachment site for suture anchor placement

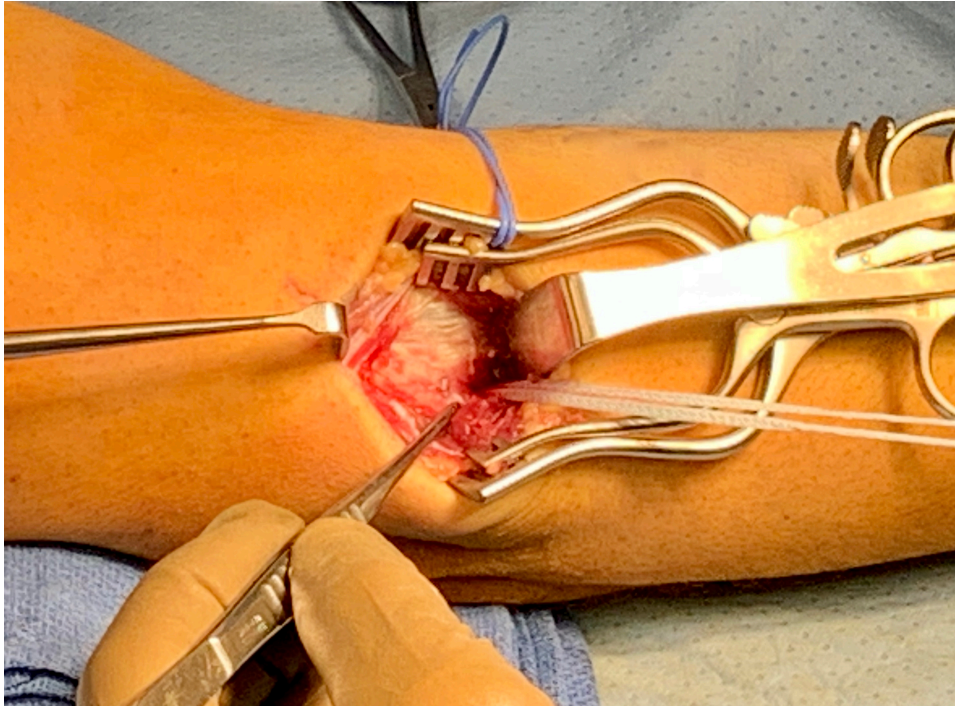


Internal Brace

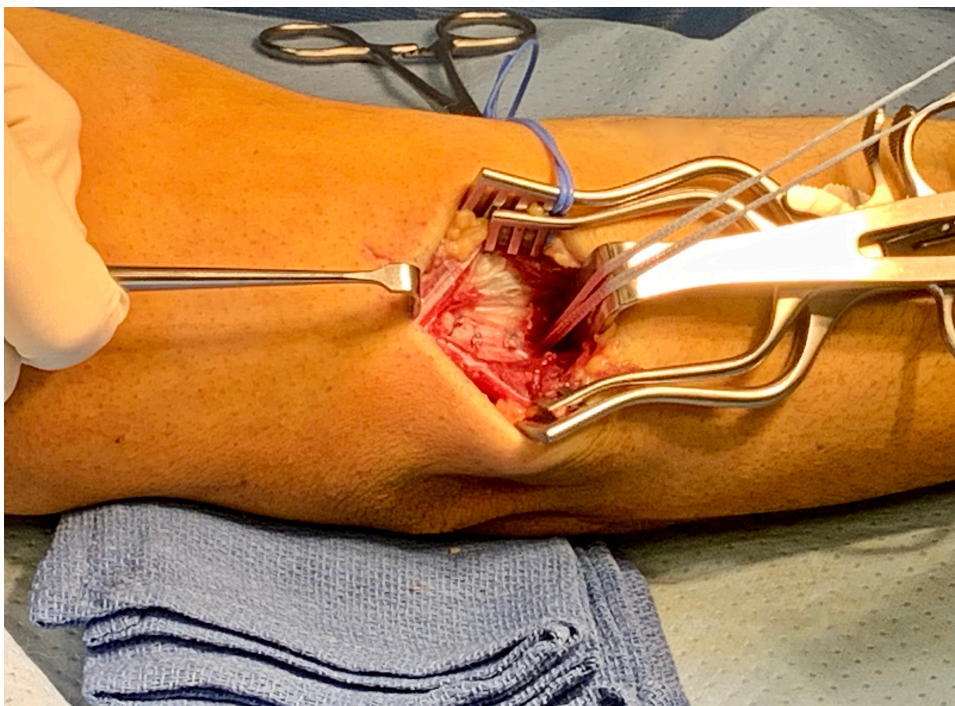


First suture anchor is placed

The incision in the UCL is repaired before placement of the second suture anchor.

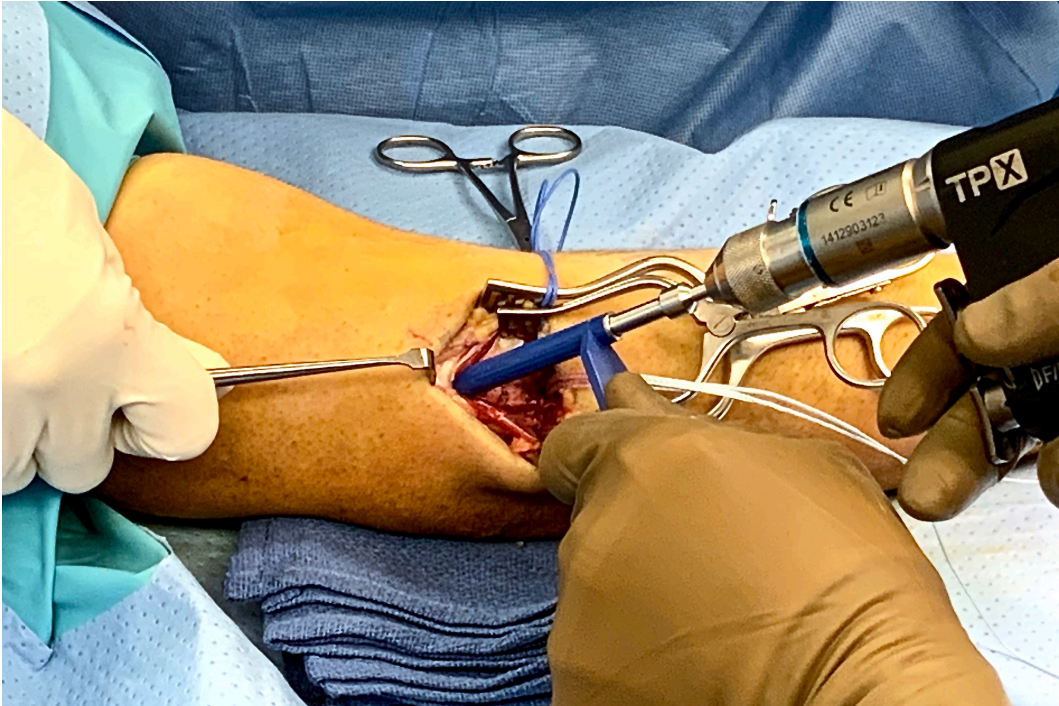


Torn UCL repaired to its bony attachment with suture from anchor

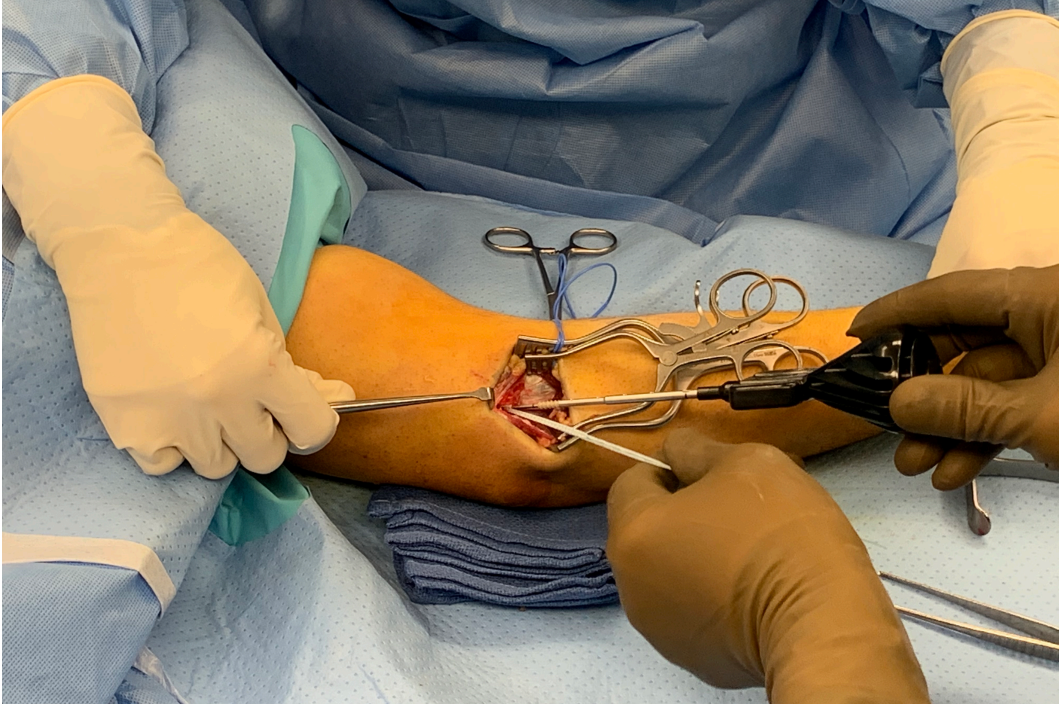


Repaired incision of the UCL

Second suture anchor site drilled and anchor is placed with fibertape.

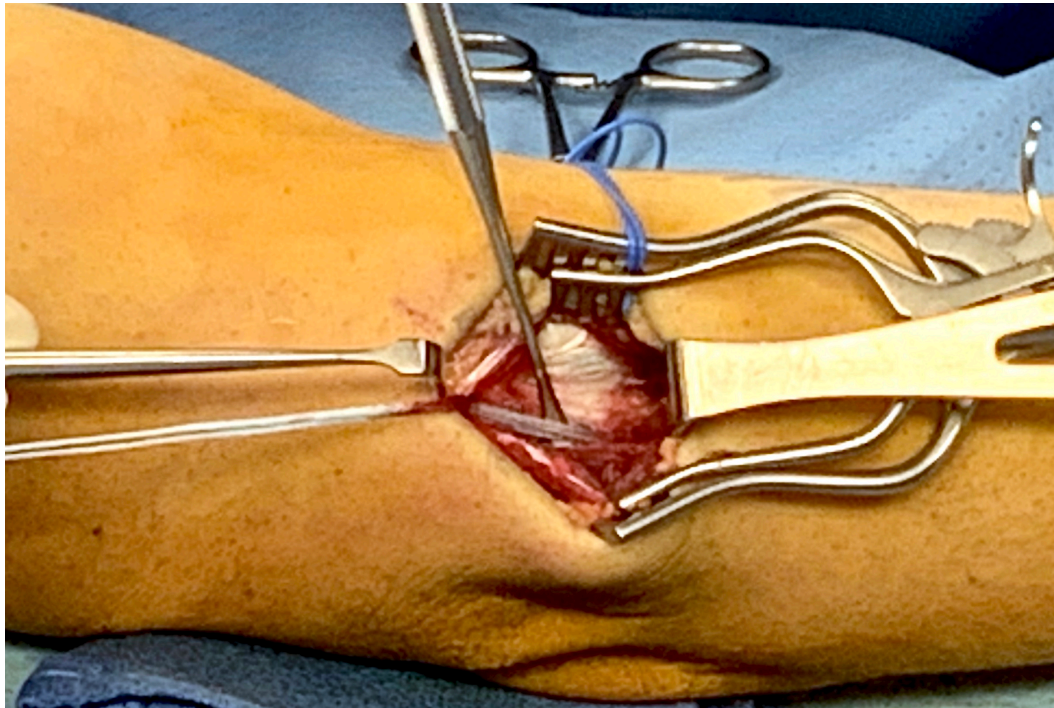


Drilling for second suture anchor

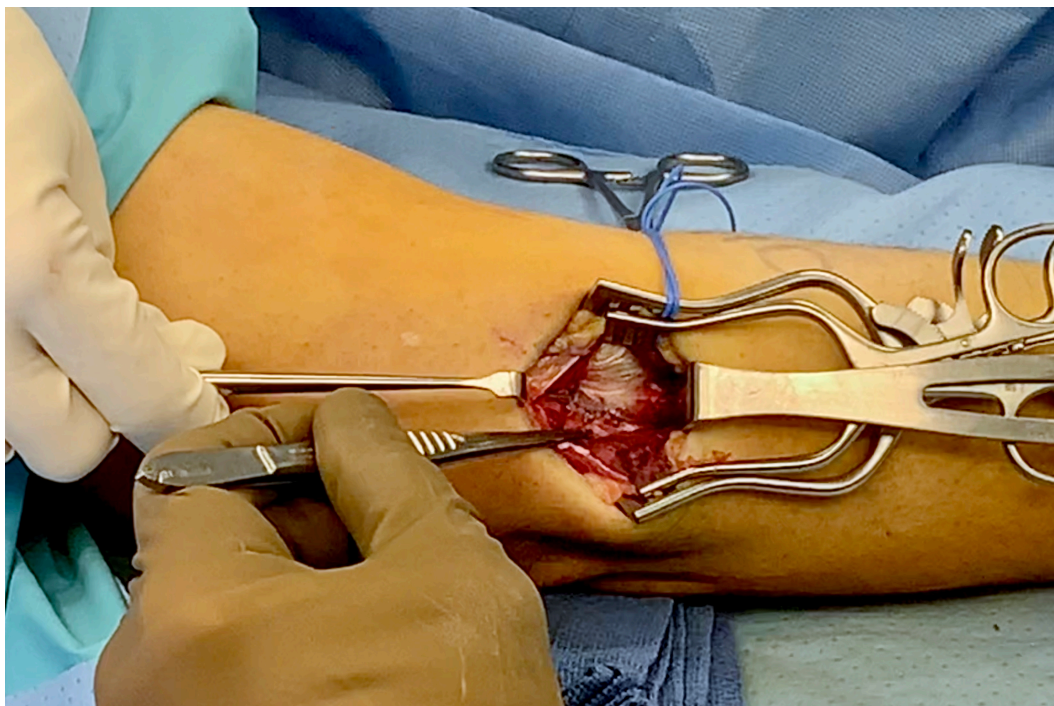


Second suture anchor being placed

After second suture anchor is placed, fibertape is assessed to make sure it is not overtightened, then is repaired to the UCL.



Fibertape is assessed for tightness



Fibertape repaired to UCL

Following incision closure and placement of dressings, a postoperative brace is applied.



Postoperative brace for UCL Repair

Physical Therapy begins approximately one week after surgery and an Interval Throwing Program begins 10-12 weeks after surgery. Return to play is typically 6-7 months after surgery.

