

TMI Sports Medicine Pitchers UCL with Internal Brace - 8 Month Recovery Program

If you want to throw hard and throw accurately you must throw hard and throw repeatedly. However, your shoulder and arm must have time to gradually adapt to the throwing you will do. Progressing too rapidly in the throwing program will DELAY your recovery and return to sport.

Always pay careful attention to your throwing motion and mechanics:

- Use a gathering step to initiate your throwing motion on all "long toss" throws,
- Use four-seam grip to allow better view of ball rotation,
- Stay on top of the ball and throw over the top,
- Keep your elbow at or above shoulder level,
- Avoid trunk extension or shoulder dip causing high arc on throws,
- Use your legs and follow through with your arm and trunk.
- Emphasize your follow through during early phases of the throwing program to promote good habits.

Throw on line but throw with sub-maximal effort and throw within your comfort level. Throw to the target and not through the target. If you cannot throw on line at a given distance, do not lob the ball in an attempt to move to the next level. Example: At 90 feet, the arc or the path of the ball should not carry the ball higher than approximately ten feet.

If you have access to a radar gun, refer to the velo charts at the end of this document for a guideline on throwing intensity. These documents provide velocity parameters for throwing based on the **average** velocity of the athlete when they were healthy.

Throwing with a qualified coach or pitching instructor will improve your ability to progress in the throwing program. Videotape your throwing workout at least once a week to analyze your throwing motion / mechanics and your progress.

You must meet the following criteria to move to the next level:

- No pain or stiffness while throwing,
- No pain or stiffness after throwing (mild muscle soreness acceptable),
- Submaximal and fundamentally sound throwing motion / mechanics,
- Good throwing accuracy throughout the current level,
- Throws are consistently on line,
- Good Strength throughout the current level with little fatigue.

Continue your upper trunk, scapula and rotator cuff rehabilitation program throughout the throwing program.

The throwing program is a **guide** that should be **adapted or modified** to meet your individual progress and problems. **Anticipate throwing every other day for three days at each throwing level.** However, if you are having any problems at a given level, remain at that level or return to the previous level until the problem resolves. Do not hesitate to take an extra day(s) off if you are having problems. Notify your physician or rehabilitation specialist if your problem does not resolve.

Rehab and shoulder exercise should now only be performed on the specified throwing days. Recovery is an integral part of a successful throwing program. We will use the off days as recovery for the shoulder and arm. It is ok to use light tubing or a cuff program as a daily warm-up but it should not be used as a strengthening exercise on off throwing days. Please take advantage of the non-throwing days to train balance, proprioception, core and the lower body.

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WEEKS 1-6	WEEK 2	WEEK 2-3	WEEK 4	WEEK 5
Restore full ROM initiate grip strength	initiate isometric shoulder program and scapular stabilization program	initiate cardio work when wounds are closed, initiate lower body work using no upper extremity (body weight circuits, abdominal work (no upper extremity)	D/C Brace (unless modified by Surgeon) and initiate progressive isotonic shoulder program with no valgus stress	initiate light forearm strengthening (manual resistance for control), initiate PRI program
WEEK 6	WEEK 7-9	WEEK 10	WEEK 11	WEEK 12
continue with progressive lower body, cardio, core and arm care, addition of forearm dumbbells and rice at week 8	initiate low-level upper body workouts (tubing program)	2 hand plyometric work, and ball flips (prone and forearm on alternate days)	initiate one hand plyometrics, initiate body blade work,	Initatie sock throws and add ¼ wall dribbles and decel tosses

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14 Weeks Post-op
Week 1 Throwing (60 ft. phase)

Day 1	15 throws at 45-60 ft 10 throws at 60 ft 10 throws at 45 ft
Day 2	No Throwing
Day 3	15 throws at 45-60 ft 15 throws at 60 ft 10 throws at 45 ft
Day 4	No Throwing
Day 5	15 throws at 45-60 ft 20 throws at 60 ft 10 throws at 45 ft
Day 6/7	No Throwing

15 Weeks Post-op
Week 2 Throwing (60 ft. phase)

Day 1	15 throws at 45-60ft 25 throws at 60 ft 10 throws at 45 ft
Day 2	No Throwing
Day 3	15 throws at 45-60ft 30 throws at 60 ft 10 throws at 45 ft.
Day 4	No Throwing
Day 5	20 throws at 45-60 ft 35 throws at 60 ft 10 throws at 45 ft
Day 6/7	No Throwing

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16 Weeks Post-op
Week 3 Throwing (60-75 ft. phase)

Day 1	20 throws at 45-60 ft 35 throws at 60 ft 10 throws at 45 ft
Day 2	No Throwing
Day 3	15 throws at 45-60 ft 40 throws at 60 ft 10 throws at 45 ft
Day 4	No Throwing
Day 5	10 throws at 45 ft 10 throws at 60 ft 15 throws at 75 ft 10 throws at 45-60 ft
Day 6/7	No Throwing

17 Weeks Post-op
Week 4 Throwing (75 ft. phase)

Day 1	10 throws at 45 ft 10 throws at 60 ft 20 throws at 75 ft 10 throws at 45-60 ft
Day 2	No Throwing
Day 3	20 throws 45 ft - 60 ft 25 throws at 75 ft 10 throws at 60 ft
Day 4	No Throwing
Day 5	20 throws 45 ft – 60 ft 30 throws at 75 ft. 10 throws 60 ft
Day 6/7	No Throwing

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18 Weeks Post-op
Week 5 Throwing (75-90 ft. phase)

Day 1	20 throws 45 ft – 60 ft 30 throws at 75 ft 5 throws at 80-85 ft 10 throws at 60 ft – 45 ft
Day 2	No Throwing
Day 3	15 throws at 45 ft – 60 ft 10 throws at 75 ft 5 throws 80-85 15 throws at 90 ft 10 throws at 60 ft
Day 4	No Throwing
Day 5	10 throws at 45 ft – 60 ft 20 throws at 75 ft - 85 ft 20 throws at 90 ft 10 throws at 60 ft
Day 6/7	No Throwing

19 Weeks Post-op
Week 6 Throwing (90 ft. phase)

Day 1	10 throws 45 ft – 60 ft 20 throws at 75-85 ft 25 throws at 90 ft 10 throws at 60 ft
Day 2	No Throwing
Day 3	10 throws 45 ft – 60 ft 20 throws at 75-85 ft 30 throws at 90 ft 10 throws at 60 ft
Day 4	No Throwing
Day 5	10 throws 45 ft – 60 ft 15 throws at 75-85 ft 35 throws at 90 ft 10 throws at 60 ft
Day 6/7	No Throwing

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20 Weeks Post-op
Week 7 Throwing (90-105 ft. phase)

Day 1	10 throws 45 ft – 60 ft 15 throws at 75-85 ft 40 throws at 90 ft 10 throws at 60 ft
Day 2	No Throwing
Day 3	10 throws 45 ft – 60 ft 15 throws at 75-85 ft 40 throws at 90 ft 10 throws at 60 ft
Day 4	No Throwing
Day 5	10 throws 45 ft – 60 ft 15 throws at 75-85 ft 25 throws at 90 ft - 105 ft 15 throws at 105 ft 10 throws at 60 ft
Day 6/7	No Throwing

21 Weeks Post-op
Week 8 Throwing (105 ft. phase)

Day 1	10 throws 45 ft – 60 ft 10 throws at 75-85 ft 20 throws at 90 ft - 105 ft 20 throws at 105 ft 10 throws at 60 ft
Day 2	No Throwing
Day 3	10 throws 45 ft – 60 ft 10 throws at 75-85 ft 15 throws at 90 ft - 105 ft 25 throws at 105 ft 10 throws at 60 ft
Day 4	No Throwing
Day 5	10 throws 45 ft – 60 ft 10 throws at 75-85 ft 15 throws at 90 ft - 105 ft 30 throws at 105 ft 10 throws at 60 ft
Day 6/7	No Throwing

22 Weeks Post-op

Week 9 Throwing (120 ft. phase)+ Intro to daily throwing

Day 1	10 throws at 45 ft – 60 ft 20 throws at 75-105 ft 15 throws at 105-120 ft 10 throws at 60 ft
Day 2	10 min Light catch to 60 ft
Day 3	10 throws at 45 ft – 60 ft 20 throws at 75-120 ft 15 throws 120 ft 15 throws 90 ft - 60 ft
Day 4	10 min Light catch to 60 ft
Day 5	10 throws at 45 ft – 60 ft 20 throws at 75-120 ft 20 throws 120 ft 15 throws 90 ft - 60 ft
Day 6	10 min Light catch to 60 ft
Day 7	No throwing

23 Weeks Post-op

Week 10 Throwing (120 ft. phase)

Day 1	30 throws 60 ft – 115 ft 30 throws at 120 ft 10 throws 90 ft – 60 ft
Day 2	10 min Light catch to 75 ft
Day 3	30 throws 60 ft – 115 ft 35 throws at 120 ft 10 throws 90 ft – 60 ft
Day 4	10 min Light catch to 75 ft
Day 5	30 throws 60 ft – 115 ft 40 throws at 120 ft 10 throws 90 ft – 60 ft
Day 6	10 min Light catch to 75 ft
Day 7	No throwing

24 Weeks Post-op

Week 11 Throwing (Cone Drill Phase + Flat Ground)

The Cone Drill Program is designed to improve your ability to throw on a downward plane with better arm strength and throwing accuracy. Place a cone at 90-105 feet from your position. Your throwing partner is positioned behind the cone to catch the ball on a hop. Your goal is to throw with effort, imagining that you are throwing through the chest of another throwing partner standing thirty feet in front of the cone. Attempt to hit the cone.

Day 1	Warm-up throws up to 120 ft. 1 Set of 15 throws @ a cone placed at 90 ft. End session with Flat ground 10 – 15; FB only
Day 2	10 min Light catch to 75 ft
Day 3	Warm-up throws up to 120 ft. 1 Set of 20 throws @ a cone placed at 90 ft. End session with Flat ground 10 – 15; FB, 5 changeups
Day 4	10 min Light catch to 75 ft
Day 5	Warm-up throws up to 120 ft. 1 Set of 25 throws @ a cone placed at 90 ft. End session with Flat ground 10 – 15; All pitches
Day 6	10 min Light catch to 75 ft
Day 7	No Throwing

25 Weeks Post-op

Week 12 Throwing (Mound)

Day 1	Long toss to 120 ft Bullpen 10 pitches; FB only
Day 2	10 min Light catch up to 90 ft.
Day 3	Long toss to 120 ft Mound 10 pitches only working on mechanics
Day 4	10 min Light catch up to 90 ft.
Day 5	Long toss to 120 ft Bullpen 15 pitches; FB only
Day 6	10 min Light catch up to 90 ft.
Day 7	off

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26 Weeks Post-op
Week 13 Throwing (Mound)

Day 1	Long toss to 120 ft Bullpen 20 pitches; FB only
Day	10 mins Light catch up to 90 ft.
Day 3	Long toss to 120 ft Mound 15 pitches only working on mechanics
Day 4	10 mins Light catch up to 90 ft.
Day 5	Long toss to 120 ft Bullpen 25 pitches; FB only
Day 6	10 mins Light catch up to 90 ft or optional day off
Day 7	off

27 Weeks Post-op
Week 14 Throwing (Mound)

Day 1	Long toss to 120 ft Bullpen 30x pitches; FB only
Day	10 mins Light catch up to 90 ft.
Day 3	Long toss to 120 ft Mound 15x pitches only working on mechanics
Day 4	10 mins Light catch up to 90 ft.
Day 5	Long toss to 120 ft Bullpen 35x pitches; FB only
Day 6	10 mins Light catch up to 90 ft or optional day off
Day 7	off

28 Weeks Post-op
Week 15 Throwing (Mound)

Day 1	Long toss to 120 ft Bullpen 20/15 split; FB/Changeups 5-10
Day 2	10 mins Light catch to 90 ft. Introduce 6-8 breaking balls at 60 ft flatground.
Day 3	Long toss to 120 ft Bullpen 15 pitches only working on mechanics
Day 4	10 mins Light catch to 90 ft. Progress with 6-8 breaking balls at 60 ft flatground.
Day 5	Long toss to 120 ft Bullpen 20/20 split; FB/Changeups 5-10
Day 6	10 mins Light catch to 90 ft. Progress with 6-8 breaking balls at 60 ft flatground.
Day 7	off

29 Weeks Post-op
Week 16 Throwing (Mound)

Day 1	Long toss to 120 ft Bullpen 25/25 split; All pitches 5-10 Change ups, 6 breaking balls
Day 2	10 mins Light catch to 90 ft
Day 3	Long toss to 120 ft
Day 4	10 mins Light catch to 90 ft
Day 5	Long toss to 120 ft Bullpen 25/25 split All pitches 5-10 Change ups, 6 breaking balls
Day 6	10 mins Light catch to 90 ft
Day 7	off

30 Weeks Post-op

Week 17 Throwing (Progression to Live Batting Practice)

Day 1	Long toss 120 ft
Day	Warm-up throws up to 120 ft. 35 pitch bullpen all pitches
Day 3	Off or light catch
Day 4	Long toss to 120 feet
Day 5	Long toss to 120 ft 15-20 pitch bullpen all pitches Live BP 15 pitches
Day 6	off or light catch
Day 7	off

31 Weeks Post-op

Week 18 Throwing (Live Batting Practice)

Day 1	Long toss
Day	Warm-up throws up to 120 ft. 15-20 pitch bullpen all pitches Live BP 25 pitches
Day 3	Off or light catch
Day 4	Long toss
Day 5	Warm up long toss to 120 ft 20-25 pitch bullpen all pitches Simulated Game 1 innings or 20 pitches
Day 6	optional off or light catch
Day 7	off

32 Weeks Post-op
Week 19 Throwing (Simulated Games. Try to progress to 7 day routine if a starter)

Day 1	Long Toss
Day	Warm up long toss to 120 ft 15-20 pitch bullpen all pitches Simulated Game 2 innings or 30 pitches
Day 3	Off or light catch
Day 4	Long toss
Day 5	Warm up long toss to 120 ft 10-15 pitch bullpen all pitches Simulated Game 3 innings or 45 pitches
Day 6	Long toss
Day 7	Off or light catch

33 Weeks Post-op
Week 20 Throwing (Initiate Rehab Start)

Day 1	Long toss
Day 2	Rehab Start 2 innings, 30 pitches max
Day 3	Off or light catch
Day 4	Long toss
Day 5	Warm-up throws up to 120 ft 15 pitch light bullpen
Day 6	light catch
Day 7	Rehab Start 3 innings, 45 pitches max

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Radar Gun Velocity Ranges

For Pitchers with Average FB velo between 80-85 mph

<u>Distance</u>		<u>Avg.</u>		<u>Range</u> <small>Start at low end of Range and progress to top end of range</small>
60'		56 mph		52-60 mph
75'		62 mph		60-64 mph
90'		67 mph		65-69 mph
105'		73 mph		70-75 mph
120'		76 mph		75-77 mph

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Radar Gun Velocity Ranges

For Pitchers with Average FB velo between 85-90 mph

<u>Distance</u>		<u>Avg.</u>		<u>Range</u> <small>Start at low end of Range and progress to top end of range</small>
60'		57 mph		55-60 mph
75'		63 mph		61-66 mph
90'		69 mph		67-72 mph
105'		74 mph		72-77 mph
120'		79 mph		78-81 mph

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Radar Gun Velocity Ranges

For Pitchers with Average FB velo between 90-95 mph

<u>Distance</u>		<u>Avg.</u>		<u>Range</u> <small>Start at low end of Range and progress to top end of range</small>
60'		62 mph		59-64mph
75'		67 mph		64-69 mph
90'		73 mph		70-75 mph
105'		77 mph		75-80 mph
120'		84 mph		81-86 mph

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