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## Women's Artistic Gymnastics Levels, Skills, and Scoring System

\*Please refer to the USA Gymnastics and FIG Code of Points for full rules and details on each level, as this is a summary and not an entire list.

Level	Description	Skills	Highest Score
Level 1	Compulsory beginner routine Must be 4 years old to compete	<u>Vault:</u> Run, jump on spring board and straight jump off spring board and stick <u>Bars:</u> Low bar only, pull over, cast, back hip circle, under swing dismount <u>Beam:</u> Kick, releve lock stance, straight jump, arabesque, side handstand fall dismount <u>Floor:</u> Cartwheel, backward roll, straight jump, forward roll, handstand to 45°	10.00
Level 2	Compulsory beginner routine Must be 5 years old to compete	<u>Vault:</u> Run, jump on spring board, and perform handstand flat back on stacked mats <u>Bars:</u> Glide return, pull over, two casts, back hip circle, underswing dismount <u>Beam:</u> Straight jump, 30° arabesque, pivot turn, cartwheel to handstand dismount <u>Floor:</u> Cartwheel to backward roll to push up position, split leap with 60° connected to a split jump, handstand hold 1 second, candle stick, and bridge kickover	10.00
Level 3	Compulsory beginner routine Must be 6 years old	<u>Vault:</u> Front handspring over stacked mats turned sideways landing on their feet <u>Bars:</u> Glide swing and pull over or kip, cast, two back hip circles, front hip circle, small cast, cast squat on jump straight dismount <u>Beam:</u> Handstand, two straight jumps, arabesque to 45°, split leap to 90°, two pivot turns, side handstand quarter turn dismount <u>Floor:</u> Handstand forward roll, 90° leap, straight jump split jump 90°, split on floor, half turn, backward roll to push up position, and round off back handspring	10.00
Level 4	Compulsory medium difficulty routine Must be 7 years old to compete	<u>Vault:</u> Front handspring over the vault table <u>Bars:</u> Kip, cast to horizontal, squat on and jump to high bar, long hang kip, cast horizontal, back hip circle, and underswing to tap swing and dismount to half turn tap hand <u>Beam:</u> Cartwheel, half turn, straight jump split jump 120° connected, handstand hold, scale to horizontal, straight leg leap 120°, same dismount as level 3 but hold handstand for 1 second <u>Floor:</u> Back walkover, 150° split, Front handspring step out to cartwheel to back extension roll, straight jump ½ turn, leap 120°, straddle jump 120°, split on floor 180°, full turn, round off two back handsprings	10.00
Level 5	Compulsory more difficult routine Must be 7 years old to compete	<u>Vault:</u> Same as level 4 <u>Bars:</u> Kip, cast above horizontal, clear hip or staldler or sole circle, cast squat on to high bar, long hang kip, cast above horizontal, long hand pull over, underswing to tap swing fly away	10.00 vault, beam, and floor Uneven Bars: 9.5 start if no flyway dismount on bars

		<p><u>Beam</u>: Choice of forward or back walkover or back roll to ¾ handstand or back handspring, full turn, split jump 150°, seesong front leg 45°, scale above horizontal and hold, straight leg leap 150° with straight connected, cartwheel connected to straight jump, back tuck dismount off beam</p> <p><u>Floor</u>: Front tuck or front aerial or aerial, two front handsprings in a row intro cartwheel to back extension roll, straight jump to full turn, leap or switch leap to 150° connected to a straddle jump, forward split on floor, full turn, and round off back handspring back tuck</p>	
Level 6	First year of optional routines Must be 7 years old to compete	<p><u>Vault</u>: Non-flipping timer on vault landing on stacked mats (front handspring, tsuke timer, or yurchenko timer) and must touch feet before falling flat to back</p> <p><u>Bars</u>: Circling skill requirements, 45° on casts, 6 skills in the routine</p> <p><u>Beam</u>: Non-flight acro series or single flight skill, 180° on leap, full turn, salto or aerial dismount 6 skills in the routine</p> <p><u>Floor</u>: 3 skill acro pass and 2 must have flight, second pass can be salto or aerial, dance passage with 180° leap, and full turn, 6 skills in the routine</p>	10.00
Level 7	Second year of optional routines Must be 7 years old to compete	<p><u>Vault</u>: Same as level 6 but can choose to not touch feet and rotate onto back or stomach pending vault choice</p> <p><u>Bars</u>: Cast to handstand, B circling element, can do giants on high bar, salto dismount, 7 skills in the routine</p> <p><u>Beam</u>: Acro series with or without flight but in the routine needs to have a single flight element, leap or jump to 180°, full turn, and salto or aerial dismount, 7 skills in the routine</p> <p><u>Floor</u>: 3 passes on floor, 7 skills in the routine</p>	10.00
Level 8	Optional routines Must be 8 years old to compete First year flipping a vault Allowed to start release moves on uneven bars	<p><u>Vault</u>: Flipping vault</p> <p><u>Bars</u>: 1 bar change, release element from high to low bar or basic low to high or turn on bars, 8 skills in the routine</p> <p><u>Beam</u>: Double flight series and allowed to twist on dismount, 8 skills in the routine</p> <p><u>Floor</u>: 3 different saltos, 2 salto pass, can twist, 8 skills in the routine</p>	10.00
Level 9	Optional routines Must be 8 years old to compete First year where you need to obtain “bonus” on each event	<p><u>Vault</u>: Flipping vault</p> <p><u>Bars</u>: 2 bar changes, can do B and C flight/release element, B salto dismount, 8 skills in the routine * Release move on uneven bars are required</p> <p><u>Beam</u>: Flight series, B dismount, and other components in the routine to obtain bonus</p> <p><u>Floor</u>: 8 skills in the routine</p>	10.00, but you start from a 9.7 and need to do bonus skills to get your 10.00 start value
Level 10	Optional routines Must be 9 years old Second year of bonus but now more difficult; these gymnasts are typically getting recruited for college gymnastics	<p><u>Vault</u>: Flipping and usually twisting vault</p> <p><u>Bars</u>: C and B flight/release, C turn, C salto dismount, 8 skills in the routine *Usually two release moves on bars</p> <p><u>Beam</u>: Series BC or EA, C dismount, 8 skills in the routine</p> <p><u>Floor</u>: 8 skills in the routine</p>	10.00, but you start from a 9.5 and need to do bonus skills to get your 10.00 start value
TOPS	Ages 8-10 Gymnasts who are hoping to do Hopes or Elite gymnastics	This is not a level but instead an additional training program that gymnasts between the ages of 8 to 10 years old compete and perform in. There is a set of conditioning exercises that the gymnasts are tested on and based off of a ranking/scoring system they get invited to a national TOPS camp.	There is a set scoring system for the tops conditioning/ routine.
Hopes	Two age groups: Ages 11-12 and Age 13-14 This is a transition between the developmental program and the elite program	Level 9 and 10 athletes who compete at a pre-elite level. They have to qualify for competitions and their routines and scores are based off of the USA Gymnastics Code of Points as well FIG Code of Points.	There are two scores combined together: 1. Execution (which is out of a 10.00 and then deductions are taken) and 2. difficulty score (which has “no limit”).
Junior Elite	Ages 11 to 15	These athletes compete at the highest level for ages 11 to 15 and use the USA Gymnastics Code of Points as well FIG Code of Points.	Same as Hopes/above

	Competing at the highest level of gymnastics for ages 11 to 15. These athletes are ineligible for the Olympics due to age.		
Senior Elite	Age 16 and above Highest level of gymnastics and able to compete at the Olympics if qualified at Olympic Trials or Olympic selection camp	This is the highest level of gymnastics. Gymnasts use the Code of Points to create routines and are then scored based off of their difficulty (with skills given certain points for each skill) as well as their execution which is out of a 10.00 and then this score is combined.	Same as Hopes/Junior/above
Collegiate Gymnast	Traditionally gymnasts are ages 17 to 23 years old	Traditionally these gymnasts are previous level 10 gymnasts and Elite gymnasts Considered less intense than elite gymnastics and some level 10 programs. The collegiate gymnastics program has their own Code of Points. There are Divisions I, II, and III	10.00
Xcel Bronze	Minimum age to compete is 5 years old Optional routines but the easiest level and similar to levels 1-3	<u>Vault:</u> Option 1: 9.00 straight jump on to a mat then handstand flat back; Option 2: run jump to handstand flat back; Mat height 16" minimum and 48" max height and can use alternative springboard without a deduction <u>Bars:</u> Only on low bar, 4 A skills, mount, cast with hips leaving the bar, 360 circling element, dismount (no salto); No B skills and no low bar giant <u>Beam:</u> 4 A skills, time limit 45 seconds, ½ turn on one or 2 feet, one jump or leap, one acro element (no flight), dismount cannot be a salto or aerial, not allowed to do any B, salto, or walkover <u>Floor:</u> 4 A skills, 2 direct acro elements with or without flight, 2 <sup>nd</sup> acro pass minimum of 1 acro with or without flight, leap of 60 degrees, minimum of ½ turn, routine time 45 seconds, not allowed to do B skills (except straddle jump or side leap), no saltos or aerials, and can only do a maximum of 2 acro flight skills per routine	Vault 9.00 or 10.00 10.00 on bars, beam, and floor
Xcel Silver	Must be 6 years old to compete Optional routines but harder than Xcel Bronze and similar to levels 1-3	<u>Vault:</u> Option 1: front handspring over the mat (horizontal); Option 2: quarter on or ½ on over the mat (horizontal); Mat height 24" and maximum 48; *can use alternative springboard and can use a sting mat <u>Bars:</u> 5 A skills, can go to high bar, otherwise same requirements as bronze, cast 45 degrees of below, dismount (no salto) <u>Beam:</u> 5 A skills, routine 50 seconds, minimum half turn on 1 foot, 1 jump or leap minimum of 90°, acro but no flight, dismount, not allowed to do a B acro and no C or higher skills <u>Floor:</u> 5 A skills, need a minimum of 2 directly acro element and one must have flight, second acro pass two directly connected elements with or without flight, dance pass with 90° leaps, full turn on one foot, No B acro, no C or higher value, and can only do one salto or aerial per routine, time is 60 seconds for the routine.	10.00 10.00 on bars, beam, and floor
Xcel Gold	Must be 7 years old to compete Optional routines but harder than Xcel Silver and similar to levels 1-4	<u>Vault:</u> Multiple choices based off of the xcel code of points (common vaults are front handsprings and quarter or ½ on) <u>Bars:</u> 6 A skills, No "C" or higher elements, no giants and no release skills with a bar change, two 360 circling skills, and dismount on high bar <u>Beam:</u> 6 A skills, No C value elements, time is 60 seconds, full turn, two different group elements with 120° of a split, 2 acro elements with or without flight and needs to go through vertical, and dismount <u>Floor:</u> 6 A skills, first pass minimum of connected acro flight elements, second pass two directly connected acro flight element or one aerial or salto, dance passage leap is 120 degrees, turn on 1 foot-full turn, not allowed any B twisting, no C or higher value, and routine is 1 minute long	10.00 Can use alternative springboard but start value goes down to a 9.5 10.00 on bars, beam, and floor
Xcel Platinum	Must be 8 years old to compete Optional routines but harder than Xcel Gold and similar to levels 5-7	<u>Vault:</u> multiple choices based off of the xcel code of points (common vaults are front handsprings, and ½ on ½ off) <u>Bars:</u> 6 A skills and 1 B skill, cannot do "C" or higher (unless it is a clear hip to handstand, stalder to handstand, or toe hand), 360° circling skill, kip, and high bar dismount (minimum of an A)	Varied start value based off of vault choice 10.00 on bars, beam, and floor

		<p><u>Beam:</u> 6 A skills and 1 B skill, full turn, dance series, must be 120° leap, one acro flight or acro flight with or without, and dismount, one minute and 15 second routine</p> <p><u>Floor:</u> 6 A skills and 1 B skill, minimum of 2 directly connected acro flight with A or B salto, and second acro connecting 2 flight or B salto, dance passage leap 155°, full turn on one foot, no C acro value parts, No D or higher value part, and routine is 1 minute and 30 seconds.</p>	
Xcel Diamond	Must be 9 years old to compete Optional routines but harder than Xcel Platinum and similar to levels 7-8	<p><u>Vault:</u> multiple choices based off of the xcel code of points (common vaults are ½ on ½ off and can now flip vaults)</p> <p><u>Bars:</u> 5 A skills, and 2 B skills, maximum of 1 D skill but no bonus, not allowed to do any E skills, giants are allowed, release or turn skill are now allowed, and dismount needs to be a salto or hecht or any B dismount from the high bar</p> <p><u>Beam:</u> 5 A skills and 2 B skills, allowed 1 D skill value part but no bonus, not allowed to do E skills, routine time 1 minute 15 seconds, full turn, dance series split 155°, acro series with or without flight, one acro flight element, and dismount (salto or aerial allowed)</p> <p><u>Floor:</u> 5 A skills and 2 B skills, two separate acro pass with one being two directly connected acro flight and one separate isolated C salto, two different saltos with one being a B salto, dance passage 155°, minimum of a B turn on one foot, maximum of one D allowed but not allowed to do an E and time for routine is 1 minute and 30 seconds</p>	Varied start value based off of vault choice 10.00 on bars, beam, and floor
Xcel Sapphire	Must be 12 years old to compete Optional routines but harder than Xcel Diamond and similar to levels 8-10	<p><u>Vault:</u> multiple choices based off of the xcel code of points (most difficult level with flipping or twisting vaults)</p> <p><u>Bars:</u> 3 A skills, 3 B skill, and 1 C skill, no E skills, no repeating of a 360° circling element, minimum of B dismount or C connected to an A dismount</p> <p><u>Beam:</u> 3 A skills, 3 B skills, 1 C skill, no E skills allowed, routine time 1 minute 30 seconds, full turn, dance series or leap 180°, acro series minimum of 1 flight skill, need a B dismount or acro flight skill connected to an A</p> <p><u>Floor:</u> 3 A skills, 3 B skills, 1 C skill, one acro pass with two saltos can be the same or different, need 3 different saltos throughout the routine and one needs to be a B, dance passage 180°, and minimum of B turn on one foot, not allowed any E, and routine is one minute and 30 seconds</p>	Varied start value based off of vault choice 9.6 Bars, beam, and floor Start value

# Gymnast Wrist Women's Artistic Return-to-Gymnastics Protocol

1. Phase 1: Rest and Healing Phase
2. Phase 2: Hanging and Closed Chain Non-Weight-Bearing Exercises
3. Phase 3: Open Chain and Weight-Bearing Exercises

## Gymnast Wrist Return-to-Gymnastics Protocol Phase 1: Rest and Healing Phase

	Physical Exam Guidelines Imaging Guidelines Bracing/Cast Guidelines	Range of Motion Guidelines Strength Guidelines	Gymnastics Specific
<p>Diagnosis till 4-6 weeks</p> <p><b>*Always follow soreness rules at the end of the protocol and in Table 3*</b></p>	<p><b>Physical Exam</b></p> <ul style="list-style-type: none"> <li>• Gymnast is tender to palpate on distal radial physis</li> <li>• Pain with weight bearing in wrist extension at the distal radial physis</li> <li>• Pain in active and passive wrist extension</li> </ul> <p><b>Imaging</b></p> <p><b>X-ray: PA (90-90), lateral, oblique (consideration of contralateral x-rays for a direct comparison)</b></p> <ul style="list-style-type: none"> <li>• X-rays performed at time of diagnosis/ initial visit may show:               <ul style="list-style-type: none"> <li>• Distal radial physis widening</li> <li>• Distal radial physis early closure</li> <li>• Distal radial physis sclerosis</li> <li>• Parrot beaked appearance of distal radius</li> <li>• Ulnar positive variance</li> </ul> </li> </ul> <p><b>Brace/cast:</b></p> <p>True immobilization for 4-6 weeks</p>	<p><b>Range of Motion</b></p> <ul style="list-style-type: none"> <li>• No wrist motion, complete rest</li> <li>• Focus on thoracic mobility</li> <li>• Focus on pectoralis mobility</li> </ul> <p><b>Strength</b></p> <ul style="list-style-type: none"> <li>• None at the wrist joint</li> <li>• Focus on strength at the rotator cuff and periscapular muscles that do not load or stress the wrist</li> <li>• Modalities: forearm massage, and thoracic spine: upper trapezius/back massage</li> </ul>	<p>Please see pages 1-4 for skill descriptions</p> <p><b>Week 1:</b> Complete rest</p> <p><b>Week 2:</b> Be cautious that you are not causing an overuse injury to other body parts Conditioning: legs, core, and back Tumbl Trak®/trampoline, floor, and low beam: leaps, jumps, turns, and kicks</p> <p><b>Week 3+:</b> Be cautious that you are not causing an overuse injury to other body parts Tumbl Trak®/trampoline, floor, and low beam: back tuck, front tuck, aerials *May not be allowed while in a cast *Patient and family accepting the risk that the gymnast could fall onto his/her wrist</p>

### Progress to phase 2 if:

- No pain to palpation on the distal radial physis
- No pain with hanging on the distal radial physis
- X-rays are obtained and do not show worsening of physeal injury
- Cleared by YOUR medical provider to progress to phase 2

## Gymnast Wrist Return-to-Gymnastics Protocol Phase 2: Hanging and Closed Chain Non-Weight-Bearing Exercises

	Physical Exam Guidelines Imaging Guidelines Bracing/Cast Guidelines	Range of Motion Guidelines Strength Guidelines	Gymnastics Specific
<p>2 - 6 weeks</p> <p><b>*Always follow soreness rules at the end of the protocol and in Table 3*</b></p>	<p><b><u>Physical Exam:</u></b></p> <ul style="list-style-type: none"> <li>• Gymnast is NOT tender to palpate on distal radial physis</li> <li>• Gymnast does NOT have pain with weight bearing in wrist extension at the distal radial physis</li> <li>• Gymnast does NOT have pain in active and passive wrist extension</li> <li>• Gymnast does NOT have pain with hanging on the distal radial physis</li> </ul> <p><b><u>Imaging:</u></b></p> <ul style="list-style-type: none"> <li>• X-ray: PA (90-90), lateral, oblique (consideration of contralateral x-rays for a direct comparison)</li> <li>• X-rays performed may show improvement at the distal radial physis or similar appearance</li> </ul> <p><b><u>Brace/cast:</u></b> Discontinuation of cast/brace</p>	<p><b><u>Range of Motion Guidelines:</u></b></p> <ul style="list-style-type: none"> <li>• Begin wrist, elbow, and shoulder motion to within 5-10 degrees of uninjured side</li> <li>• Continue with thoracic mobility and pectoralis mobility</li> </ul> <p><b><u>Modalities/Strength Guidelines:</u></b></p> <ul style="list-style-type: none"> <li>• Begin wrist/hand intrinsic strength, forearm strength, biceps, and triceps</li> <li>• Continue with periscapular, rotator cuff</li> <li>• Continue modalities: forearm massage, thoracic spine upper trapezius/back massage</li> </ul>	<p><b>Begin Hanging Protocols</b></p> <p>First figure out your gymnast's hanging max baseline numbers/measurements and then using those number start at 70% of your maximum number to create 3 repetitions based off of that.</p> <p><b>Have your gymnast perform:</b></p> <ol style="list-style-type: none"> <li>1. <b>Straight-arm hang with scapular activation (max time 60 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 60 seconds</li> </ul> </li> <li>2. <b>Scapular pull ups (max number 20x)</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 20 scapular pulls</li> </ul> </li> <li>3. <b>Front grip chin hold (max time 30 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 30 seconds</li> </ul> </li> <li>4. <b>Reverse grip chin hold (max time 30 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 30 seconds</li> </ul> </li> <li>5. <b>Chin up (max 5):</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 5 chin ups</li> <li>• Focus on pulling up over 5 seconds, and lowering down over 5 seconds</li> <li>• If needed please use a resistance band to assist or start with your chin at the bar and slowly lower yourself down over 5 seconds</li> </ul> </li> <li>6. <b>Pull up (max 5)</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 5 pull ups</li> <li>• Focus on pulling up over 5 seconds, and lowering down over 5 seconds</li> <li>• If needed please use a resistance band to assist or start with your chin at the bar and slowly lower yourself down over 5 seconds</li> </ul> </li> <li>7. <b>Leg lifts (tuck or pike, max 10)</b> <ul style="list-style-type: none"> <li>• If these are challenging, start with tuck leg lifts and then work to straight legs</li> <li>• Don't forget to actively hang (meaning activate your scapula)</li> <li>• Goal to do 3 x 10</li> </ul> </li> </ol> <p>• Once numbers are established based off your one-rep max on a single rail bar, please perform these exercises in sets of 3 and at every gymnastics practice and when possible at home (as many as 5 days a week and as few as 3 days a week). If the set is getting easier for you, add 2-5 seconds or 2-5 more repetitions each day you do these exercises.</p> <p>• It should take 20-30 minutes to complete everything and have an adult or coach assist with the first week while performing this to assess for proper technique and form.</p> <p>• The goal of these exercises is to go SLOW and use PROPER FORM AND TECHNQUE. It is better to do less numbers with perfect technique than to hold longer with incorrect form.</p>

**Progress to phase 3 if:**

- Completed hanging protocol with no pain and met the goal of the numbers
- Continues to have no pain to palpation on the distal radial physis AND no pain with hanging on the distal radial physis

**Gymnast Wrist Return-to-Gymnastics Phase 3: Open Chain and Weight-Bearing Exercises**

	Physical Exam Guidelines Imaging Guidelines Bracing/Cast Guidelines	Range of Motion Guidelines Strength Guidelines	Gymnastics Specific	
4-12 weeks  <b>*Always follow soreness rules at the end of the protocol and in Table 3*</b>	<p><b>Physical Exam</b></p> <ul style="list-style-type: none"> <li>• Gymnast continues to be is NOT tender to palpate on distal radial physis</li> <li>• Gymnast continues to NOT have pain with weight bearing in wrist extension at the distal radial physis</li> <li>• Gymnast has completed the hanging protocol</li> <li>• Gymnast has ROM within 5-10 degrees of the contralateral side</li> <li>• Gymnast has strength at the wrist, elbow, and shoulder within 10% of the contralateral side</li> </ul> <p><b>Imaging</b></p> <ul style="list-style-type: none"> <li>• X-ray performed at 6 months from diagnosis: PA (90-90), lateral, oblique (consideration of contralateral x-rays for a direct comparison)</li> <li>• X-rays performed may show: Improvement at the distal radial physis or similar appearance</li> </ul> <p><b>Brace/cast:</b> Consideration of wrist guards with return to weight bearing but only for a short period of time*</p>	<p><b>Range of Motion Guidelines</b></p> <ul style="list-style-type: none"> <li>• Gymnast has ROM within 5-10 degrees of the contralateral side</li> <li>• Continue with Thoracic mobility and pectoralis mobility</li> </ul> <p><b>Modalities/Strength Guidelines</b></p> <ul style="list-style-type: none"> <li>• Gymnast has strength at the wrist, elbow, and shoulder within 10% of the contralateral side</li> <li>• Continue Modalities: forearm massage, thoracic spine upper trapezius/back massage</li> </ul>	<p><b>Begin compression/weight bearing protocols</b></p> <ul style="list-style-type: none"> <li>• Plank-handstand: Start with holding a plank on floor for 15 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds                             <ul style="list-style-type: none"> <li>• Focus on activating your scapula and be sure you are symmetric in activating your muscles</li> <li>• Stop if you have pain or soreness and see soreness rules</li> </ul> </li> <li>• Once you get to 20 seconds 3 times in a plank handstand, you can repeat the same process only now put your feet up on a block and be in a pike position                             <ul style="list-style-type: none"> <li>• Start with holding for 10 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds</li> </ul> </li> <li>• Once you get to 20 seconds 3 times in a pike position, you can repeat the same process only now do a handstand against the wall                             <ul style="list-style-type: none"> <li>• Start with holding for 10 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds</li> </ul> </li> <li>• Once you get to 20 seconds 3 times in a handstand against the wall, you can repeat the same process only now do a handstand without the wall                             <ul style="list-style-type: none"> <li>• Start holding for 5 seconds 3 times and increase by 5 seconds every other day until you get to 30 seconds</li> </ul> </li> <li>• <b>Once the initial weight bearing phase is complete and there is no pain or soreness, follow the below plans (based off of level) and limit ALL skills to 5 or less per skill per event per practice until clearance given by your medical provider.</b></li> </ul>	
			<p><b>Compulsory and xcel bronze to platinum</b></p> <p><b>Week 1</b></p> <ul style="list-style-type: none"> <li>• Vault: Can do sprints or any drills that do not involve your hands</li> </ul>	<p><b>Optional and xcel Diamond and sapphire</b></p> <p><b>Week 1</b></p> <ul style="list-style-type: none"> <li>• Vault: Can do sprints or any drills that do not involve your hands</li> </ul>

			<ul style="list-style-type: none"> <li>• Bars: Can start bar basics on low bar (kips, casts, back hip circles, front hip circles, clear hips) and continue the above hanging program for warm ups</li> <li>• Beam: Continue all leaps, jumps, and turns</li> <li>• Floor: Cleared to start non-flight skills</li> <li>• Other: Start conditioning cutting the number to ¼ of normal numbers as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 2</b></p> <ul style="list-style-type: none"> <li>• Vault: Same as week 1</li> <li>• Bars: Can move skills from low bar to high bar and add in tap swings, and strap bar and continue the hanging protocol for warm up</li> <li>• Beam: Can start non-flight skills on low beam</li> <li>• Floor: see Tumbl Trak©/trampoline</li> <li>• Tumbl track/trampoline: Can start single flight skills</li> <li>• Other: Progress conditioning to ½ the normal as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 3</b></p> <ul style="list-style-type: none"> <li>• Vault: can start front handsprings and ½ ons/tsuke vault timers on vault trainer</li> <li>• Bars: Continue your hanging protocol and can now progress to bar dismounts</li> <li>• Beam: Progress non-flight skills to high beam</li> <li>• Floor: Can start single flight skills</li> <li>• Tumbl Trak©/trampoline: Can progress to double flight skills</li> <li>• Other: Progress conditioning to ¾ the normal as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 4</b></p>	<ul style="list-style-type: none"> <li>• Bars: can start bar basics on low bar (kips, casts, back hip circles, front hip circles, clear hips) and continue the above hanging program for warm ups</li> <li>• Beam: Continue all leaps, jumps, and turns and start non-flight skills on low beam</li> <li>• Floor: Cleared to start non-flight skills</li> <li>• Tumbl trak©/trampoline: Can start single flight skills</li> <li>• Other: Start conditioning cutting the number to ¼ of normal numbers as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 2</b></p> <ul style="list-style-type: none"> <li>• Vault: Can start front handsprings and ½ ons/tsuke vault timers on vault trainer</li> <li>• Bars: Can move skills from low bar to high bar and add in clear hips, toe hands, tap swings, and strap bar including back/front giants and continue the hanging protocol for warm up</li> <li>• Beam: Can progress non-flight skills to high beam</li> <li>• Floor: Can start single flight skills</li> <li>• Tumbl Trak©/trampoline: Can progress to double flight skills</li> <li>• Other: Progress conditioning to ½ the normal as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 3</b></p> <ul style="list-style-type: none"> <li>• Vault: Can start yurchenko timers on a vault trainer and progress front handsprings and ½ ons/tsuke vault timers on regular table</li> <li>• Bars: Can progress giants to pit bar and then to regular bar as tolerated and continue the above hanging program for warm ups</li> <li>• Beam: Can start single flight skills on low beam</li> <li>• Floor: Can progress to double flight skills</li> </ul>
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			<ul style="list-style-type: none"> <li>• Vault: Can start front handsprings or half-ons/Tsuke timer on the real vault table</li> <li>• Bars: cleared for any circling element and continue the hanging protocol for warm up</li> <li>• Beam: Can start single flight skills on low beam</li> <li>• Floor: Can progress to double flight skills</li> <li>• Tumbl Trak©/trampoline: Can progress to triple flight skills/full passes for compulsory routines and xcel bronze to platinum routines</li> <li>• Other: Progress to full conditioning numbers as tolerated, PT exercises, and 5 mental routines on each event</li> </ul> <p><b>Week 5</b></p> <ul style="list-style-type: none"> <li>• Vault: Can start working yurchenko timers if previously working on a vault trainer and progress to the real vault as tolerated</li> <li>• Bars: Cleared for all compulsory and xcel bronze to platinum bars and continue the hanging protocol for warm up</li> <li>• Beam: Progress single flight skills to high beam, begin series on low beam and progress as tolerated to high beam, and cleared for all dismounts</li> <li>• Floor: Can progress to triple flight skills/full passes for compulsory routines and xcel bronze to platinum routines • Other: PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 6</b></p> <ul style="list-style-type: none"> <li>• Vault: Cleared for all compulsory and xcel bronze to platinum vaults</li> <li>• Bars: Cleared for all compulsory and xcel bronze to platinum bars</li> <li>• Beam: Cleared for all compulsory and xcel bronze to platinum beam</li> </ul>	<ul style="list-style-type: none"> <li>• Tumbl Trak©/trampoline: Can progress to triple flight skills/full passes for optional routines and xcel diamond to sapphire routines</li> <li>• Other: Progress conditioning to ¾ the normal as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 4</b></p> <ul style="list-style-type: none"> <li>• Vault: Can start yurchenko timers on the regular vault table</li> <li>• Bars: Can start pirouettes and blind changes with a spot and progress as tolerated and can also begin bar dismounts in the pit and continue the above hanging program for warm ups</li> <li>• Beam: Can progress single flight to high beam and start series on low beam</li> <li>• Floor: Can progress to triple flight skills/full passes for optional routines and xcel diamond to sapphire routines</li> <li>• Other: Progress to full conditioning numbers as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 5</b></p> <ul style="list-style-type: none"> <li>• Vault: Can flip and/or twist all vaults starting in the pit and progressing to a firmer surface as tolerated</li> <li>• Bars: Can start release elements and progress bar dismounts to a firmer surface and continue the above hanging program for warm ups</li> <li>• Beam: Can progress series to high beam and start dismounts</li> <li>• Floor: Cleared for all floor for all optional and xcel diamond and sapphire levels</li> <li>• Other: PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 6</b></p> <ul style="list-style-type: none"> <li>• Vault: Cleared for all vault for all optional and xcel diamond and sapphire levels</li> </ul>
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			<ul style="list-style-type: none"> <li>• Floor: Cleared for all compulsory and xcel bronze to platinum floor</li> <li>• Other: PT exercises and 5 mental routines on each event</li> </ul>	<ul style="list-style-type: none"> <li>• Bars: Cleared for all bars for all optional and xcel diamond and sapphire levels</li> <li>• Beam: Cleared for all beam for all optional and xcel diamond and sapphire levels</li> <li>• Floor: Cleared for all floor for all optional and xcel diamond and sapphire levels</li> <li>• Other: PT exercises and 5 mental routines on each event</li> </ul>
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**\*Soreness rules:**

- If no soreness, advance gymnastics per your plan.
- If sore during warm-up but soreness is gone within the first 15 minutes of practice, repeat the previous workout/skills from last practice. If elbow becomes sore during this workout, stop and take 2 days off. Upon return to gymnastics, progress back one week.
- If sore more than 1 hour after practice or the next day, take 1 day off and repeat the most recent week of your gymnastics plan.
- If sore during warm-up and soreness continues through the first 15 minutes of practice, stop gymnastics/weight bearing skills and take 2 days off. Upon return to gymnastics, drop down to the previous week.
- If you experience sharp pain in your elbow, stop what skill you are doing, tell an adult, keep track of what you were doing and 48 hours later, if you have no pain, you can try that skill again.
- If the pain comes back, please follow up with your sports medicine provider.

## Elbow OCD Return-to-Gymnastics Protocol Operative Management (OATS)

Time	Plan
<b>0-2 weeks post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> Cast</li> <li>• <b>Imaging:</b> Pre-op 3T Elbow MRI</li> <li>• <b>Range of Motion:</b> NONE</li> <li>• <b>Modalities/Strength:</b> NONE</li> <li>• <b>Gymnastics Specific:</b> NONE</li> </ul>
<b>2-6 weeks post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> Brace (provider dependent)</li> <li>• <b>Imaging:</b> NONE</li> <li>• <b>Range of Motion:</b> AROM wrist, elbow, shoulder (no resistance), thoracic, pectoralis mobility</li> <li>• <b>Modalities/Strength:</b> NONE</li> <li>• <b>Gymnastics Specific:</b> <ul style="list-style-type: none"> <li>○ Be cautious that you are not causing an overuse injury to other body parts</li> <li>○ Conditioning: legs, core, and back</li> <li>○ At 4-6 weeks post-op running, leaps, jumps, and turns pending elbow motion*</li> </ul> </li> </ul> <p style="margin-left: 40px;">*Patient and family accepting the risk that the gymnast could fall onto his/her elbow</p>
<b>6-12 weeks post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> NONE</li> <li>• <b>Imaging:</b> Possible X-ray</li> <li>• <b>Range of Motion:</b> PROM: Wrist, elbow, shoulder, and continue with thoracic mobility, and pectoralis mobility</li> <li>• <b>Modalities/Strength:</b> Isometric hand, wrist, and shoulder strength</li> <li>• <b>Gymnastics Specific:</b> <ul style="list-style-type: none"> <li>○ Can now do leaps, jumps, walks, kicks, and turns on Tumbl Trak®/trampoline, floor, and low beam*</li> </ul> </li> </ul> <p style="margin-left: 40px;">*Patient and family accept the risk that the gymnast could fall onto his/her elbow</p> <p style="margin-left: 40px;">*Limit all skills to 5-10 per skill per event to avoid overuse injuries</p>
<b>12 weeks post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> NONE</li> <li>• <b>Imaging:</b> Possible X-ray</li> <li>• <b>Range of Motion:</b> Regain full wrist, elbow, and shoulder motion</li> <li>• <b>Modalities/Strength:</b> Isometric elbow</li> <li>• <b>Gymnastics Specific:</b> <ul style="list-style-type: none"> <li>○ 12-24 weeks: cleared for all “no armed/upper extremity” flight skills on Tumbl Trak®/trampoline, floor, and low beam*</li> </ul> </li> </ul> <p style="margin-left: 40px;">*Patient and family accept the risk that the gymnast could fall onto his/her elbow</p> <p style="margin-left: 40px;">*Limit all skills to 5-10 per skill per event to avoid overuse injuries</p>
<b>6 months (24 weeks) post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> possible brace to help avoid elbow hyperextension</li> <li>• <b>Imaging:</b> 3T MRI</li> <li>• <b>Range of Motion:</b> full ROM, no restrictions</li> <li>• <b>Modalities/Strength:</b> Isotonic strength should be within 10% of non-injured side</li> <li>• <b>Gymnastics Specific:</b> <ul style="list-style-type: none"> <li>○ 24-26 weeks post-op: Begin hanging protocols</li> <li>○ First figure out your gymnast’s hanging max baseline numbers/measurements and then using those number start at 70% of your maximum number to create 3 repetitions based off of that.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ <b>Have your gymnast perform:</b> <ol style="list-style-type: none"> <li>1. <b>Straight arm hang with scapular activation (max time 60 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 60 seconds</li> </ul> </li> <li>2. <b>Scapular pull ups (max number 20x)</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 20 scapular pulls</li> </ul> </li> <li>3. <b>Front grip chin hold (max time 30 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 30 seconds</li> </ul> </li> <li>4. <b>Reverse grip chin hold (max time 30 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 30 seconds</li> </ul> </li> <li>5. <b>Chin up (max 5):</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 5 chin ups</li> <li>• Focus on pulling up over 5 seconds, and lowering down over 5 seconds</li> <li>• If needed please use a resistance band to assist or start with your chin at the bar and slowly lower yourself down over 5 seconds</li> </ul> </li> <li>6. <b>Pull up (max 5)</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 5 pull ups</li> <li>• Focus on pulling up over 5 seconds, and lowering down over 5 seconds</li> <li>• If needed please use a resistance band to assist or start with your chin at the bar and slowly lower yourself down over 5 seconds</li> </ul> </li> <li>7. <b>Leg lifts (tuck or pike max 10)</b> <ul style="list-style-type: none"> <li>• If these are challenging, start with tuck leg lifts and then work to straight legs</li> <li>• Don't forget to actively hang (meaning activate your scapula)</li> <li>• Goal to do 3 x 10</li> </ul> </li> </ol> </li> <li>○ Once numbers are established based off your one-rep max on a single rail bar, please perform these exercises in sets of 3 and at every gymnastics practice and when possible at home (as many as 5 days a week and as few as 3 days a week). If the set is getting easier for you, add 2-5 seconds or 2-5 more repetitions the next day you do the above exercises.</li> <li>○ It should take you 20-30 minutes to complete everything. Have an adult or coach assist with the first week while performing this to access for proper technique and form.</li> <li>○ The goal of these exercises is to go SLOW and use PROPER FORM AND TECHNIQUE. It is better to do less numbers with perfect technique than hold longer with incorrect form.</li> </ul>
<p><b>25-27 weeks post-op</b></p>	<p><b>Begin compression/weight bearing protocols:</b></p> <ul style="list-style-type: none"> <li>• Plank-handstand: Start with holding a plank on floor for 15 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds. <ul style="list-style-type: none"> <li>• Focus on activating your scapula and be sure you are symmetric in activating your muscles.</li> <li>• Stop if you have pain or soreness and see soreness rules.</li> </ul> </li> <li>• Once you get to 20 seconds 3 times in your plank, you can repeat the same process, only now put your feet up on a block and be in a pike position. <ul style="list-style-type: none"> <li>• Start with holding for 10 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds.</li> </ul> </li> <li>• Once you get to 20 seconds 3 times in a pike position, you can repeat the same process only now do a handstand against the wall. <ul style="list-style-type: none"> <li>• Start with holding for 10 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Once you get to 20 seconds 3 times in a handstand against the wall, you can repeat the same process only now do a handstand without the wall.</li> <li>• Start with holding for 5 seconds 3 times and increase by 5 seconds every other day until you get to 30 seconds.</li> </ul>
<b>27-36 weeks post-op</b>	<ul style="list-style-type: none"> <li>○ <b>27-28 weeks post-op:</b> Non-flight skills on low beam and floor, single flight on Tumbl Trak©/trampoline, and low bar basics (limit to 5 or less per skill per event per practice)</li> <li>○ <b>29-30 weeks post-op:</b> Non-flight skills on high beam, single flight on floor, double flight on Tumbl Trak©, and high bar work (limit to 5 or less per skill per event per practice)</li> <li>○ <b>31-32 weeks post-op:</b> Single flight on low beam, double flight on floor, triple flight on Tumbl Trak©, vault timer drills on vault trainer, and bar dismounts (limit to 5 or less per skill per event per practice)</li> <li>○ <b>33-34 weeks post-op:</b> Single flight on high beam, double flight/series on low beam, triple flight on floor, full clearance on Tumbl Trak©, and vault timers on regular vault/table (limit to 5 or less per skill per event per practice)</li> <li>○ <b>35-36 weeks post-op:</b> Double flight on high beam, triple flight on floor, full clearance on Tumbl Trak©, bar releases, and vault flipping/twisting (limit to 5 or less per skill per event per practice)</li> </ul>
<b>9 months post-op</b>	<ul style="list-style-type: none"> <li>• Brace/cast/splint: No brace</li> <li>• Imaging: No imaging</li> <li>• Range of Motion: Full ROM, no restrictions</li> <li>• Modalities/Strength: Full strength, no restrictions</li> <li>• Gymnastics Specific: Full gymnastics</li> </ul>

# Medial Tensile Injuries Return-to-Gymnastics Protocol Women’s Artistic

1. Phase 1: Rest and Healing Phase
2. Phase 2: Hanging and Closed Chain Non-Weight-Bearing Exercises
3. Phase 3: Open Chain and Weight-Bearing Exercises

## Medial Tensile Injuries Return-to-Gymnastics Protocol Phase 1: Rest and Healing Phase

Phase 1: Rest and Healing Phase	Physical Exam Guidelines Imaging Guidelines Bracing/Cast Guidelines	Range of Motion Guidelines Strength Guidelines	Gymnastics Specific
<p>Diagnosis till 4-6 weeks</p> <p><b>*Always follow soreness rules at the end of the protocol and in Table 3*</b></p>	<p><b><u>Physical Exam</u></b></p> <ul style="list-style-type: none"> <li>• Gymnast is tender to palpate on medial elbow</li> <li>• Pain with weight bearing in elbow extension</li> <li>• Pain in active and passive elbow flexion and extension</li> <li>• Missing full ROM with flexion and extension</li> </ul> <p><b><u>Imaging</u></b></p> <p><b>X-ray and MRI (at time of diagnosis)</b></p> <ul style="list-style-type: none"> <li>• Pending injury may show:               <ul style="list-style-type: none"> <li>Medial epicondylar apophysitis</li> <li>Medial epicondyle fractures</li> <li>Partial or full UCL tears</li> </ul> </li> </ul> <p><b><u>Brace/cast</u></b></p> <ul style="list-style-type: none"> <li>• Possible elbow brace for 4-6 weeks</li> </ul>	<p><b><u>Range of Motion</u></b></p> <ul style="list-style-type: none"> <li>• Wrist and shoulder motion</li> <li>• Focus on thoracic mobility</li> <li>• Focus on pectoralis mobility</li> <li>• Pending elbow specific injury-elbow motion may be limited</li> </ul> <p><b><u>Strength</u></b></p> <ul style="list-style-type: none"> <li>• None at the elbow joint</li> <li>• Focus on strength at the rotator cuff and periscapular muscles that do not load or stress the elbow</li> <li>• Modalities: Forearm massage, and thoracic spine: upper trapezius/back massage</li> </ul>	<p>Please see pages 1-4 for skill descriptions</p> <p><b>Week 1:</b> Complete rest</p> <p><b>Week 2:</b> Be cautious that you are not causing an overuse injury to other body parts. Conditioning: Legs, core, and back Tumbl Trak®/trampoline, floor, and low beam: leaps, jumps, turns, and kicks</p> <p><b>Week 3+:</b> Be cautious that you are not causing an overuse injury to other body parts. Tumbl Trak®/trampoline, floor, and low beam: back tuck, front tuck, aerials *May not be allowed while in brace *Patient and family accept the risk that the gymnast could fall onto his/her elbow.</p>

### Can progress to phase 2 if:

- No pain to palpation on the medial elbow
- No pain with hanging on the medial elbow
- Gained back almost full ROM
- Cleared by YOUR medical provider to progress to phase 2

## Medial Tensile Injuries Return-to-Gymnastics Protocol Phase 2: Hanging and Closed Chain Non-Weight-Bearing Exercises

	Physical Exam Guidelines Imaging Guidelines Bracing/Cast Guidelines	Range of Motion Guidelines Strength Guidelines	Gymnastics Specific
<p>2- 6 weeks</p> <p><b>*Always follow soreness rules at the end of the protocol and in Table 3*</b></p>	<p><b>Physical Exam</b></p> <ul style="list-style-type: none"> <li>• Gymnast is NOT tender to palpate on the medial elbow</li> <li>• Gymnast does NOT have pain with weight bearing at the medial elbow</li> <li>• Gymnast does NOT have pain in active and passive elbow flexion and extension</li> <li>• Gymnast does NOT have pain with hanging on the medial elbow</li> </ul> <p><b>Imaging</b></p> <ul style="list-style-type: none"> <li>• Medial apophysitis and Medial epicondyle fractures may consider x-rays which may show:                             <ul style="list-style-type: none"> <li>• Improvement at the medial apophysis or of fracture site</li> </ul> </li> </ul> <p><b>Brace/cast</b></p> <ul style="list-style-type: none"> <li>• Discontinuation of brace</li> </ul>	<p><b>Range of Motion Guidelines</b></p> <ul style="list-style-type: none"> <li>• Begin wrist, elbow, and shoulder motion to within 5-10 degrees of uninjured side</li> <li>• Continue with thoracic mobility and pectoralis mobility</li> </ul> <p><b>Modalities/Strength Guidelines</b></p> <ul style="list-style-type: none"> <li>• Begin Wrist/hand intrinsic strength, forearm strength, elbow, biceps, and triceps</li> <li>• Continue with periscapular, rotator cuff</li> <li>• Continue Modalities: forearm massage, thoracic spine upper trapezius/back massage</li> </ul>	<p><b>Begin hanging protocols</b></p> <ul style="list-style-type: none"> <li>• First figure out your gymnast's hanging max baseline numbers/measurements and then using those number start at 70% of your maximum number to create 3 repetitions based off of that.</li> </ul> <p><b>Have your gymnast perform</b></p> <ol style="list-style-type: none"> <li>1. <b>Straight-arm hang with scapular activation (max time 60 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 60 seconds</li> </ul> </li> <li>2. <b>Scapular pull ups (max number 20x)</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 20 scapular pulls</li> </ul> </li> <li>3. <b>Front grip chin hold (max time 30 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 30 seconds</li> </ul> </li> <li>4. <b>Reverse grip chin hold (max time 30 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 30 seconds</li> </ul> </li> <li>5. <b>Chin up (max 5):</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 5 chin ups</li> <li>• Focus on pulling up over 5 seconds, and lowering down over 5 seconds</li> <li>• If needed please use a resistance band to assist or start with your chin at the bar and slowly lower yourself down over 5 seconds</li> </ul> </li> <li>6. <b>Pull up (max 5)</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 5 pull ups</li> <li>• Focus on pulling up over 5 seconds, and lowering down over 5 seconds</li> <li>• If needed please use a resistance band to assist or start with your chin at the bar and slowly lower yourself down over 5 seconds</li> </ul> </li> <li>7. <b>Leg lifts (tuck or pike max 10)</b> <ul style="list-style-type: none"> <li>• If these are challenging, start with tuck leg lifts and then work to straight legs</li> <li>• Don't forget to actively hang (meaning activate your scapula)</li> <li>• Goal to do 3 x 10</li> </ul> </li> </ol> <p>• Once numbers are established based off your one rep max, on a single rail bar please perform these exercises in sets of three and at every gymnastics practice and when possible at home (as many as 5 days a week and as few as 3 days a week). If the set is getting easier for you add 2-5 seconds or 2-5 more repetitions each day you do these exercises.</p> <p>• It should take you 20-30 minutes to complete everything and have an adult or coach assist with the first week while performing this to assess for proper technique and form</p>

			•The goal of these exercises is to go SLOW and use PROPER FORM AND TECHNQUE. It is better to do less numbers with perfect technique than to hold longer with incorrect form.
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**Can progress to Phase 3 if:**

- Completed the above hanging protocol with no pain and met the goal of the numbers
- Continues to have:
  - No pain to palpation on the medial aspect of the elbow
  - No pain with hanging on the medial aspect of the elbow
  - Has symmetric ROM with elbow flexion and extension\*
    - \*Trying to avoid elbow hyperextension



## Medial Tensile Injuries Return-to-Gymnastics Protocol Phase 3: Open Chain and Weight-Bearing Exercises

	Physical Exam Guidelines Imaging Guidelines Bracing/Cast Guidelines	Range of Motion Guidelines Strength Guidelines	Gymnastics Specific
<p>4-12 weeks</p> <p><b>*Always follow soreness rules at the end of the protocol and in Table 3*</b></p>	<p><b>Physical Exam</b></p> <ul style="list-style-type: none"> <li>Gymnast continues to be is NOT tender to palpate on the medial elbow</li> <li>Gymnast continues to NOT have pain with weight bearing at the medial elbow</li> <li>Gymnast has completed the hanging protocol</li> <li>Gymnast has ROM within 5-10 degrees of the contralateral side*                             <ul style="list-style-type: none"> <li>*Again, trying to avoid elbow hyperextension</li> </ul> </li> <li>Gymnast has strength at the wrist, elbow, and shoulder within 10% of the contralateral side</li> </ul> <p><b>Imaging</b></p> <ul style="list-style-type: none"> <li>No new images performed</li> </ul> <p><b>Brace/cast</b></p> <ul style="list-style-type: none"> <li>Consideration of elbow braces to avoid elbow hyperextension</li> </ul>	<p><b>Range of Motion Guidelines</b></p> <ul style="list-style-type: none"> <li>Gymnast has ROM within 5-10 degrees of the contralateral side</li> <li>Continue with Thoracic mobility and pectoralis mobility</li> </ul> <p><b>Modalities/Strength Guidelines</b></p> <ul style="list-style-type: none"> <li>Gymnast has strength at the wrist, elbow, and shoulder within 10% of the contralateral side</li> <li>Continue Modalities: forearm massage, thoracic spine upper trapezius/back massage</li> </ul>	<p><b>Begin compression/weight bearing protocols</b></p> <ul style="list-style-type: none"> <li>Plank-handstand: Start with holding a plank on floor for 15 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds.                             <ul style="list-style-type: none"> <li>Focus on activating your scapula and be sure you are symmetric in activating your muscles.</li> <li>Stop if you have pain or soreness and see soreness rules.</li> </ul> </li> <li>Once you get to 20 seconds 3 times in a plank handstand, you can repeat the same process only now put your feet up on a block and be in a pike position.                             <ul style="list-style-type: none"> <li>Start with holding for 10 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds.</li> </ul> </li> <li>Once you get to 20 seconds 3 times in a pike position, you can repeat the same process only now do a handstand against the wall.                             <ul style="list-style-type: none"> <li>Start with holding for 10 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds.</li> </ul> </li> <li>Once you get to 20 seconds 3 times in a handstand against the wall, you can repeat the same process only now do a handstand without the wall.                             <ul style="list-style-type: none"> <li>Start with holding for 5 seconds 3 times and increase by 5 seconds every other day until you get to 30 seconds.</li> </ul> </li> </ul> <p><b>Once the initial weight bearing phase is complete and there is no pain or soreness follow the below plans (based off of level) and limit ALL skills to 5 or less per skill per event per practice until clearance given by your medical provider.</b></p>
			<p><b>Compulsory and xcel bronze to platinum:</b></p> <p><b>Week 1</b></p> <ul style="list-style-type: none"> <li>Vault: can do sprints or any drills that do not involve your hands</li> <li>Bars: can start bar basics on low bar (kips, casts, back hip circles, front hip circles, clear hips) and continue the above hanging program for warm ups</li> <li>Beam: Continue all leaps, jumps, and turns</li> <li>Floor: Cleared to start non-flight skills</li> </ul>

			<p>•Other: Start conditioning cutting the number to ¼ of normal numbers as tolerated, PT exercises and 5 mental routines on each event</p> <p><b>Week 2</b></p> <ul style="list-style-type: none"> <li>•Vault: same as week 1</li> <li>•Bars: can move skills from low bar to high bar and add in tap swings, and strap bar and continue the hanging protocol for warm up</li> <li>•Beam: Can start non-flight skills on low beam</li> <li>•Floor: see Tumbl Trak©/trampoline</li> <li>•Tumbl trak/trampoline: Can start single flight skills</li> <li>•Other: Progress conditioning to ½ the normal as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 3</b></p> <ul style="list-style-type: none"> <li>•Vault: Can start front handsprings and ½ ons/tsuke vault timers on vault trainer</li> <li>•Bars: Continue your hanging protocol and can now progress to bar dismounts</li> <li>•Beam: Progress non-flight skills to high beam</li> <li>•Floor: Can start single flight skills</li> <li>•Tumbl Trak©/trampoline: Can progress to double flight skills</li> <li>•Other: Progress conditioning to ¾ the normal as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 4</b></p> <ul style="list-style-type: none"> <li>•Vault: Can start front handsprings or half-ons/Tsuke timer on the real vault table</li> <li>•Bars: cleared for any circling element and continue the hanging protocol for warm up</li> <li>•Beam: Can start single flight skills on low beam</li> </ul>	<p>skills •Tumbl trak©/trampoline: Can start single flight skills</p> <p>•Other: Start conditioning cutting the number to ¼ of normal numbers as tolerated, PT exercises and 5 mental routines on each event</p> <p><b>Week 2</b></p> <ul style="list-style-type: none"> <li>•Vault: Can start front handsprings and ½ ons/tsuke vault timers on vault trainer</li> <li>•Bars: Can move skills from low bar to high bar and add in clear hips, toe hands, tap swings, and strap bar including back/front giants and continue the hanging protocol for warm up</li> <li>•Beam: Can progress non-flight skills to high beam</li> <li>•Floor: Can start single flight skills</li> <li>•Tumbl Trak©/trampoline: Can progress to double flight skills</li> <li>•Other: Progress conditioning to ½ the normal as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 3</b></p> <ul style="list-style-type: none"> <li>•Vault: Can start yurchenko timers on a vault trainer and progress front handsprings and ½ ons/tsuke vault timers on regular table</li> <li>•Bars: Can progress giants to pit bar and then to regular bar as tolerated and continue the above hanging program for warm ups</li> <li>•Beam: Can start single flight skills on low beam</li> <li>•Floor: Can progress to double flight skills</li> <li>•Tumbl Trak©/trampoline: Can progress to triple flight skills/full passes for optional routines and xcel diamond to sapphire routines</li> <li>•Other: Progress conditioning to ¾ the normal as tolerated, PT exercises and 5 mental routines on each event</li> </ul>
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			<ul style="list-style-type: none"> <li>•Floor: Can progress to double flight skills</li> <li>•Tumbl Trak©/trampoline: Can progress to triple flight skills/full passes for compulsory routines and xcel bronze to platinum routines</li> <li>•Other: Progress to full conditioning numbers as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 5</b></p> <ul style="list-style-type: none"> <li>•Vault: Can start working yurchenko timers if previously working on a vault trainer and progress to the real vault as tolerated</li> <li>•Bars: Cleared for all compulsory and xcel bronze to platinum bars and continue the hanging protocol for warm up</li> <li>•Beam: Progress single flight skills to high beam, begin series on low beam and progress as tolerated to high beam, and cleared for all dismounts</li> <li>•Floor: Can progress to triple flight skills/full passes for compulsory routines and xcel bronze to platinum routines</li> <li>•Other: PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 6</b></p> <ul style="list-style-type: none"> <li>•Vault: Cleared for all compulsory and xcel bronze to platinum vaults</li> <li>• Bars: Cleared for all compulsory and xcel bronze to platinum bars</li> <li>• Beam: Cleared for all compulsory and xcel bronze to platinum beam</li> <li>• Floor: Cleared for all compulsory and xcel bronze to platinum floor</li> <li>• Other: PT exercises and 5 mental routines on each event</li> </ul>	<p><b>Week 4</b></p> <ul style="list-style-type: none"> <li>•Vault: Can start yurchenko timers on the regular vault table</li> <li>•Bars: Can start pirouettes and blind changes with a spot and progress as tolerated and can also begin bar dismounts in the pit and continue the above hanging program for warm ups</li> <li>•Beam: Can progress single flight to high beam and start series on low beam</li> <li>•Floor: Can progress to triple flight skills/full passes for optional routines and xcel diamond to sapphire routines</li> <li>•Other: Progress to full conditioning numbers as tolerated, PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 5</b></p> <ul style="list-style-type: none"> <li>•Vault: Can flip and/or twist all vaults starting in the pit and progressing to a firmer surface as tolerated</li> <li>•Bars: Can start release elements and progress bar dismounts to a firmer surface and continue the above hanging program for warm ups</li> <li>•Beam: Can progress series to high beam and start dismounts</li> <li>•Floor: Cleared for all floor for all optional and xcel diamond and sapphire levels</li> <li>•Other: PT exercises and 5 mental routines on each event</li> </ul> <p><b>Week 6</b></p> <ul style="list-style-type: none"> <li>• Vault: Cleared for all vault for all optional and xcel diamond and sapphire levels</li> <li>• Bars: Cleared for all bars for all optional and xcel diamond and sapphire levels</li> <li>• Beam: Cleared for all beam for all optional and xcel diamond and sapphire levels</li> <li>• Floor: Cleared for all floor for all optional and xcel diamond and sapphire levels</li> </ul>
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				• Other: PT exercises and 5 mental routines on each event
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**\*Soreness rules**

- If no soreness, advance gymnastics per your plan
- If sore during warm-up but soreness is gone within the first 15 minutes of practice, repeat the previous workout/skills from last practice. If elbow becomes sore during this workout, stop and take 2 days off. Upon return to gymnastics, progress back one week.
- If sore more than 1 hour after practice, or the next day, take 1 day off and repeat the most recent week of your gymnastics plan.
- If sore during warm-up and soreness continues through the first 15 minutes of practice, stop gymnastics/weight bearing skills and take 2 days off. Upon return to gymnastics, drop down to the previous week.
- If you experience sharp pain in your elbow stop what skill you are doing, tell an adult, keep track of what you were doing and 48 hours later if you have no pain you can try that skill again.
- If the pain comes back, please follow up with your sports medicine provider.

# Shoulder Instability Return-to-Gymnastics Protocol Operative Management

Time	Plan
<b>0-6 weeks post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint/sling:</b> Sling</li> <li>• <b>Imaging:</b> Pre-op 3T MRI with or without contrast</li> <li>• <b>Range of Motion:</b> <ul style="list-style-type: none"> <li>• Gentle elbow and wrist motion</li> <li>• Pendulums</li> <li>• <b>PROM 4 weeks post-op:</b> Forward elevation 0 to 90°, external rotation 0 to 30°, and full internal ROM</li> <li>• <b>AROM at 4 weeks post-op:</b> Full internal motion</li> </ul> </li> <li>• <b>Modalities/Strength:</b> NONE</li> <li>• <b>Gymnastics Specific:</b> NONE</li> </ul>
<b>6-8 weeks post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> No sling</li> <li>• <b>Imaging:</b> NONE</li> <li>• <b>Range of Motion:</b> <ul style="list-style-type: none"> <li>• Thoracic, pectoralis mobility</li> <li>• PROM: Full forward elevation, external rotation 0 to 45°,</li> <li>• AROM: External rotation 0 to 45°,</li> </ul> </li> <li>• <b>Modalities/Strength:</b> <ul style="list-style-type: none"> <li>• Begin strength with external rotation, internal rotation, forward punch, seated rows, shrugs, and curls</li> <li>• Keep Hands within eyesight, minimize overhead movements</li> <li>• No military press, pulldowns behind neck, or wide-grip bench</li> </ul> </li> <li>• <b>Gymnastics Specific:</b> <ul style="list-style-type: none"> <li>• Be cautious that you are not causing an overuse injury to other body parts</li> <li>• Conditioning: legs, core, and back</li> <li>• 6 weeks return-to-running program*</li> <li>• 7-8 weeks can start with beginner/basic leaps, jumps, and turns on floor and low beam pending shoulder motion*</li> </ul> <p style="margin-left: 40px;">*Patient and family accepting the risk that the gymnast could fall onto his/her shoulder</p> <p style="margin-left: 40px;">*Limit all skills to 5-10 per skill per event to avoid overuse injuries</p> </li> </ul>
<b>8-12 weeks post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> NONE</li> <li>• <b>Imaging:</b> no imaging</li> <li>• <b>Range of Motion:</b> Focus on regaining full wrist, elbow, and shoulder motion and continue with thoracic mobility, pectoralis mobility</li> <li>• <b>Modalities/Strength:</b> strength should be getting closet to 10-20% of non-operative side</li> <li>• <b>Gymnastics Specific:</b> <ul style="list-style-type: none"> <li>• Can now do more advanced leaps, jumps, walks, kicks, and turns on Tumbl Trak®/trampoline, floor, and low beam*</li> </ul> <p style="margin-left: 40px;">*Patient and family accepting the risk that the gymnast could fall onto his/her elbow</p> <p style="margin-left: 40px;">*Limit all skills to 5-10 per skill per event to avoid overuse injuries</p> </li> </ul>

<p><b>12 weeks post-op</b></p>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> NONE</li> <li>• <b>Imaging:</b> no imaging</li> <li>• <b>Range of Motion:</b> Full wrist, elbow, and shoulder motion</li> <li>• <b>Modalities/Strength:</b> Full strength at wrist, elbow, and shoulder (minimum isotonic strength should be within 10% of non-injured side)</li> <li>• <b>Gymnastics Specific:</b> Begin hanging protocols <ul style="list-style-type: none"> <li>• First figure out your gymnast's hanging max baseline numbers/measurements and then using those number, start at 70% of your maximum number to create 3 repetitions based off of that.</li> <li>• <b>Have your gymnast perform:</b> <ol style="list-style-type: none"> <li>1. <b>Straight arm hang with scapular activation (max time 60 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 60 seconds</li> </ul> </li> <li>2. <b>Scapular pull ups (max number 20x)</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 20 scapular pulls</li> </ul> </li> <li>3. <b>Front grip chin hold (max time 30 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 30 seconds</li> </ul> </li> <li>4. <b>Reverse grip chin hold (max time 30 seconds)</b> <ul style="list-style-type: none"> <li>• End goal is to hold for 3 x 30 seconds</li> </ul> </li> <li>5. <b>Chin up (max 5):</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x 5 chin ups</li> <li>• Focus on pulling up over 5 seconds, and lowering down over 5 seconds</li> <li>• If needed please use a resistance band to assist or start with your chin at the bar and slowly lower yourself down over 5 seconds</li> </ul> </li> <li>6. <b>Pull up (max 5)</b> <ul style="list-style-type: none"> <li>• End goal is to increase to 3 x5 pull ups</li> <li>• Focus on pulling up over 5 seconds, and lowering down over 5 seconds</li> <li>• If needed please use a resistance band to assist or start with your chin at the bar and slowly lower yourself down over 5 seconds</li> </ul> </li> <li>7. <b>Leg lifts (tuck or pike max 10)</b> <ul style="list-style-type: none"> <li>• If these are challenging, start with tuck leg lifts and then work to straight legs</li> <li>• Don't forget to actively hang (meaning activate your scapula)</li> <li>• Goal to do 3 x 10</li> </ul> </li> </ol> </li> </ul> </li> <li>• Once numbers are established based off your one-rep max, on a single rail bar please perform these exercises in sets of three and at every gymnastics practice and when possible at home (as many as 5 days a week and as few as 3 days a week). If the set is getting easier for you add 2-5 seconds or 2-5 more repetitions each day you do the above exercises.</li> <li>• It should take you 20-30 minutes to complete everything and have an adult or coach assist with the first week while performing this to access for proper technique and form</li> <li>• The goal of these exercises is to go SLOW and use PROPER FORM AND TECHNIQUE. It is better to do less numbers with perfect technique than hold longer with incorrect form.</li> </ul>
<p><b>15-16 weeks post-op</b></p>	<p><b>Begin compression/weight bearing protocols</b></p> <ul style="list-style-type: none"> <li>▪ Plank-handstand: Start with holding a plank on floor for 15 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds <ul style="list-style-type: none"> <li>• Focus on activating your scapula and be sure you are symmetric in activating your muscles</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Stop if you have pain or soreness and see soreness rules</li> <li>▪ Once you get to 20 seconds 3 times in your plank, you can repeat the same process only now put your feet up on a block and be in a pike position <ul style="list-style-type: none"> <li>• Start with holding for 10 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds</li> </ul> </li> <li>▪ Once you get to 20 seconds 3 times in a pike position, you can repeat the same process only now do a handstand against the wall <ul style="list-style-type: none"> <li>• Start with holding for 10 seconds 3 times and increase by 5 seconds every other day until you get to 100 seconds</li> </ul> </li> <li>▪ Once you get to 20 seconds 3 times in a handstand against the wall, you can repeat the same process, only now do a handstand without the wall <ul style="list-style-type: none"> <li>• Start with holding for 5 seconds 3 times and increase by 5 seconds every other day until you get to 30 seconds</li> </ul> </li> <li>▪ Once the above has been completed and you have no pain, can start with non-flight skills (limited to 5 or less of each skill) on floor exercise</li> </ul>
<b>17-26 weeks post-op</b>	<ul style="list-style-type: none"> <li>○ <b>17-18 weeks post-op:</b> Non-flight skills on low beam and floor, single flight on Tumbl Trak©/trampoline, and low bar basics (limit to 5 or less per skill per event per practice)</li> <li>○ <b>19-20 weeks post-op:</b> Non-flight skills on high beam, single flight on floor, double flight on Tumbl Trak©, and high bar work (limit to 5 or less per skill per event per practice)</li> <li>○ <b>21-22 weeks post-op:</b> Single flight on low beam, double flight on floor, triple flight on Tumbl Trak©, vault timer drills on vault trainer, and bar dismounts (limit to 5 or less per skill per event per practice)</li> <li>○ <b>23-24 weeks post-op:</b> Single flight on high beam, double flight/series on low beam, triple flight on floor, full clearance on Tumbl Trak© and vault timers on regular vault/table (limit to 5 or less per skill per event per practice)</li> <li>○ <b>25-26 weeks post-op:</b> Double flight on high beam, triple flight on Floor, full clearance on Tumbl Trak©, bar releases, and vault flipping/twisting (limit to 5 or less per skill per event per practice)</li> </ul>
<b>6 to 6.5 months post-op</b>	<ul style="list-style-type: none"> <li>• <b>Brace/cast/splint:</b> No brace</li> <li>• <b>Imaging:</b> No imaging</li> <li>• <b>Range of Motion:</b> Full ROM, no restrictions</li> <li>• <b>Modalities/Strength:</b> Full strength, no restrictions</li> <li>• <b>Gymnastics Specific:</b> Full gymnastics</li> </ul>