

# Return to Sport Takes Teamwork

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# Disclosures

- David is employed by ATI Physical Therapy
- Erin is employed by The University of Alabama
- No other disclosures





**PT's vs AT's video**

# Foundation of Good Teamwork

- Professions complement each other
- Foundation of trust & respect
- Don't have an ego
- Communication among multidisciplinary team
- Share objective information and ideas
- Respect the group members experiences & expertise
- Collaboration for the athlete's activity modifications



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## Objectives for Today

- Understand the importance of using an interdisciplinary care team to guide an athlete through the RTS process.
  - Understand the importance of having data to inform the decision-making process of RTS.
  - Participate in a return to play protocol
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# Sharing our stuff

## Things we do at UA

- Rehab report
- Cain clinic
- Individual meetings
- Rehab assessments
- S&C assessments



## POST SURGERY DATA PROGRESSION

DOS: 04/10/2025    7/16/2025 SHOULDER			
TEST	UNINVOLVED	INVOLVED	READINESS
Time(4 M)	120	92	77%
Range of Motion	270	270	100%
Isometric Strength	NA	NA	
Isotonic Strength	1421	1346	95%
Weight Room	10735	8965	84%
Sports Science	100	100	100%
Performance	100	75	75%
TOTAL			88%

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## **NBA Under Fire After Haliburton's Apparent Achilles Injury – *Athlon Sports* 6/22/25**

<https://youtu.be/-WLMQ1dsIAg>

- "If I can walk, I want to play"
  - Day before game 7 leg was "still stiff and still sore" but planned to play through it.
  - Collaboration behind the scenes
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# Questions

- Do you think it was a good decision to play on a sore calf?
- Who do think was involved in the decision for him to play?
- How do you come to that decision?





# Our Ultimate Goal

Return the athlete  
safely and  
prepared to  
participate in  
sport with a low  
risk of re-injury.



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## How do we accomplish our goal?

- "Be data informed, not data driven"
  - Use what you have or can collect
    - Baseline measurements
    - Weight room values
    - Limb symmetry index (LSI)
    - Norms
    - Protocols
  - Goal setting steers your rehab plan
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# HIERARCHY OF REHABILITATION

Based on original work by Al Vermeil with additions from Rob Panariello and Robert Shapiro.



# Roadblocks

- Insurance
- Limitations in personnel, equipment, time, resources, specializations
- Money
- Governing body rules with interactions with coaches (NCAA rules, HS rules)







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## Factors involved in readiness for RTS

- Tissue healing
  - Balance
  - Muscular strength
  - Power and Speed
  - Agility
  - Cardiovascular fitness
  - Sport Specific Training
  - Psychological Readiness
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# Psychological Readiness



- ACL-RSI
- Building Trust

## Steps to the Assessment: Indicators to readiness

PROGRESS FROM BASIC TO MORE ADVANCED EXERCISE TO PREPARE FOR ASSESSMENT

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	ASSESSMENT
Knee to wall	DL squat	TRX SL squat	Pistol squat	Hop tests
Seated RS	Weight shift	SL balance	SL squat	YBT
Pelvic tilts/bracing	Dying bugs	Incline plank	Kneeling plank	Plank holds
AROM and cane drills	Weighted chest press/cable column press	Push up	2 arm med ball tosses	Single Arm Shot put test

Pick something. Be consistent. Stick with it.



# Y Balance Test (YBT)

- Challenge:
  - Strength
  - Flexibility
  - Neuromuscular control
  - Stability
  - ROM
  - Balance
  - Proprioception
  - Postural control
- Used for upper or lower extremity
- Multiple surfaces, less time, easy to administer



# Y Balance Test

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- Goals:
  - 85-90% of contralateral side
  - Less than 4cm difference in anterior direction
- Should not be independently used as a goal of readiness



## Y-Balance Test Upper Extremity

- Weight bearing on non-test arm first
- Medial reach, inferolateral reach, superolateral reach
- Record 3 trials



## Y-Balance Test Lower Extremity

- Shoes off; stand on center plate
- Move reach plate with contralateral leg as far as possible along the line
- Maintain heel down
- Practitioner notes the distance of the reach plate
- 3 trials each leg
- Measure distance in centimeters



# Hop Tests

## Challenges

- Strength
  - Power
- Stability
- Reaction
- Speed

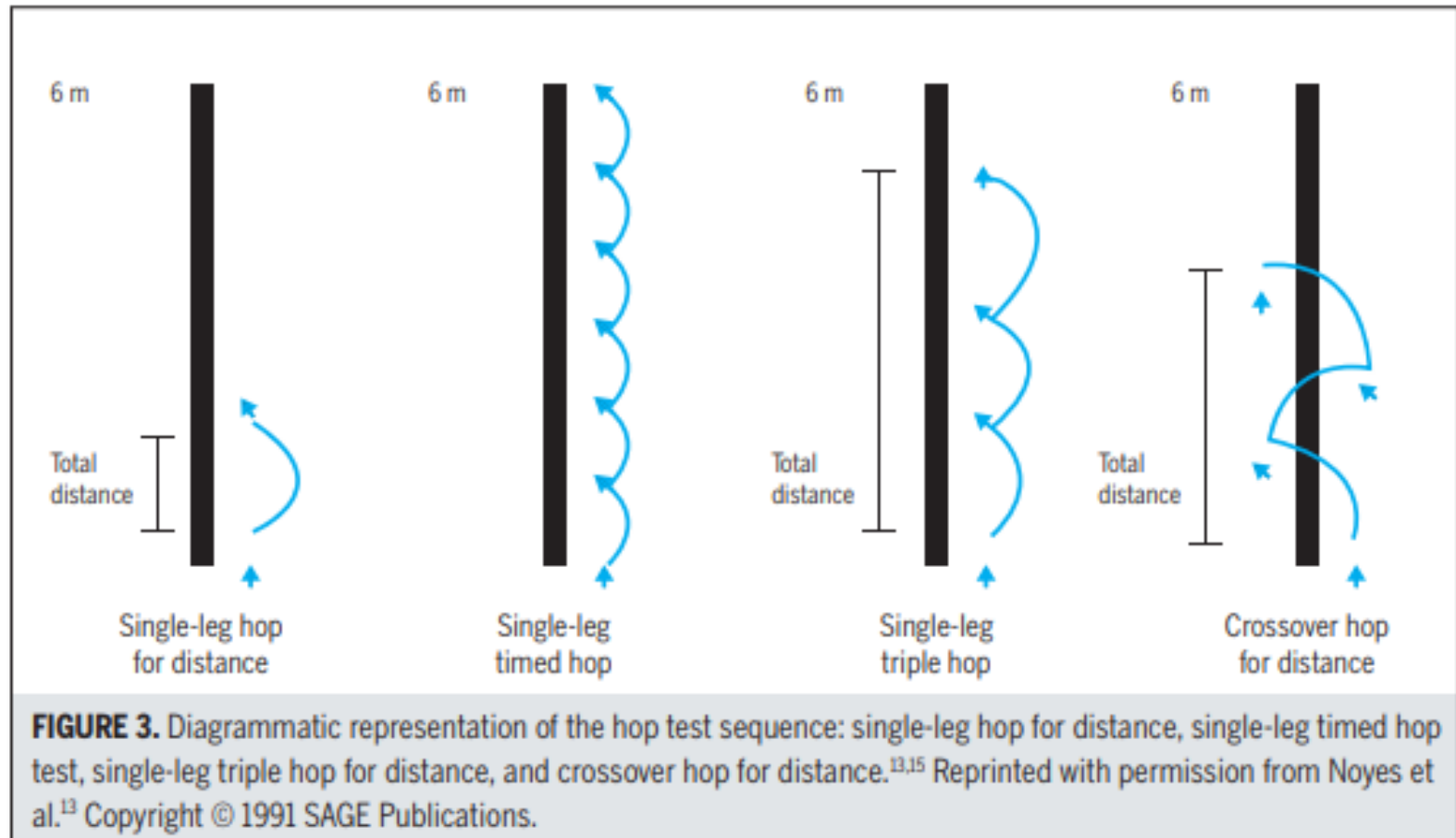


## Examples include:

- Single leg Hop
- Single leg triple hop
- Single leg timed hop
  - Crossover hop
- Figure 8 hop test



# Hop Tests



# Plank Hold Test

- Muscular endurance test
- Easy to administer
- Position: Forearm Plank.
- Hold as long as possible.





# Plank Hold Test

- Separate norms for males and females, athlete vs non-athlete

Percentiles score by sex and sport status				
	Time to Fatigue in the Plank-Test (all values in seconds)			
Percentile	Female Non-Varsity (n = 227)	Female Varsity (n = 50)	Male Non-Varsity (n = 134)	Male Varsity (n = 59)
10 <sup>th</sup>	34	45	49	74
20 <sup>th</sup>	47	59	72	84
30 <sup>th</sup>	56	63	83	94
40 <sup>th</sup>	62	74	95	117
50 <sup>th</sup>	70	87	103	125
60 <sup>th</sup>	79	97	115	140
70 <sup>th</sup>	91	110	125	157
80 <sup>th</sup>	103	162	142	183
90 <sup>th</sup>	130	194	189	228

# Single Arm Shot Put Throw

- Upper Extremity Test
- Challenges:
  - Speed
  - Power
  - Strength
- Dominate side is expected to be 5-10% better



## Shot Put test



- Sit against wall.
- Knees bent or straight
- Hold 6lb MB at shoulder height
- Instructed to push the MB as far as able
- Keep head, opposite shoulder and back on wall.
- Non-throwing arm in lap.
- Measure landing point of ball on floor from wall.
- 3 trials each arm

## Summary

- Work together
- Collect your information from assessments
- Analyze your data
  - Are they within 10-20% of baselines, contralateral limb, norms, etc
- Have they completed an ITP, running/hitting progression
- Physician clearance



# Questions?





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# Thank You!



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# **Card Activity & Practice**

