# TRA )))

# Shoulder

#### Clinical Protocol

### 1. Biceps Tendon

- Trans and long views proximally where it emerges from under acromion to musculotendinous junction distally
- Evaluate for torn or dislocated tendon
- Dynamically evaluate for subluxation with external rotation of arm
- Evaluate for areas of tendinosis
- Document thickness and echogenicity of tendon
- Evaluate tendon sheath for effusion, synovial hypertrophy, intra-articular bodies
- Corresponding power Doppler images to evaluate for tendinosis and/or tenosynovitis

#### 2. Subscapularis Tendon

- Trans and long views from musculotendinous junction to insertion on lesser tuberosity
- Dynamic evaluation with internal and external rotation may be useful to assess integrity of tendon
- Evaluate for tears
- Evaluate for areas of tendinosis
- Evaluate thickness and echogenicity of tendon

#### 3. Supraspinatus Tendon

- Trans and long views from musculotendinous junction to insertion on greater tuberosity
- Evaluate for tears
- Evaluate for areas of tendinosis
- Document thickness and echogenicity of tendon
- Evaluate sub-deltoid bursa thickness-maximum thickness 2 mm

#### 4. Infraspinatus Tendon

- Trans and long views from musculotendinous junction to insertion on greater tuberosity
- Evaluate for tears
- Evaluate for areas of tendinosis
- Document thickness and echogenicity of tendon

#### 5. Teres Minor Tendon

- Trans and long views from musculotendinous junction to insertion on surgical neck of humerus
- Evaluate for possible tears
- Evaluate for areas of tendinosis
- Document thickness and echogenicity of tendon
- 6. Gleno Humeral Joint
  - Evaluate for effusion, paralabral cyst, loose-bodies, bony abnormalities
- 7. Anterior Impingement
  - Dynamically evaluate for snapping of tendon during movement or shearing of subacromial bursa
- 8. Acromio-Clavicular Joint
  - Evaluate for geyser sign-synovial hypertrophy

## Measurements

- 1. Measure partial thickness tears in 3 planes (long, trans, and AP thickness).
  - Document tear location as bursal, articular, or intrasubstance.
  - May be useful to measure distance between intra-articular portion of biceps tendon and anterior edge of tear on short-axis.
- 2. Measure full thickness tear, degree of retraction.
- 3. Confirm abnormal echogenicity with contralateral imaging.



# **SONOGRAPHER NOTES**

INDICATIONS				DATE/TIME		
				SONOGRAPHER		
					Additional Findings/Limitations	
		Location  Within bicipital groove  Subluxated				
Bice		Tendon Sheath ☐ Normal ☐ Abnormal				
Tend	on	Continuity	☐ Nor ☐ Ten ☐ Tea	dinosis		
Subscapularis Tendon		Continuity	☐ Nor☐ Ten☐ Tea	dinosis		
Supraspinatus Tendon		Continuity	☐ Nor☐ Ten☐ Tea	dinosis		
Infraspinatus Tendon		Continuity	☐ Nor ☐ Ten ☐ Tea	dinosis		
Teres Minor Tendon		Continuity	☐ Nor ☐ Ten ☐ Tea	dinosis		
AC Joint		☐ Normal	☐ Abn	ormal		
GH Joint		☐ Normal	☐ Abr	ormal		
Sub-deltoid/ Sub-acromial bursa		☐ Normal	☐ Abnormal			
Anterior Impingement		☐ Negative	☐ Positive			
Comments						
SONOGRAPHER CONFIRMATION: My signature confirms that instructions have been provided to the conscious patient regarding this exam, that US utilizes sound waves rather than ionizing radiation, and that coupling gel is used to improve the quality of the exam.  Sonographer's Signature						
FMC	КМС	СМС	TMC	NHSC	Name	/ MR # / Label
KIC	MIC	PI	TI			
MFP	SFP	Other				
US Shoulder Worksheet						