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.

Shoulder Worksheet

SONOGRAPHER NOTES

INDICATIONS	DATE/TIME	
	SONOGRAPHER	

		Additional Findings/Limitations
Biceps Tendon	Location ❑ Within bicipital groove ❑ Subluxated Tendon Sheath ❑ Normal ❑ Abnormal Continuity ❑ Normal ❑ Tendinosis ❑ Tear	
Subscapularis Tendon	Continuity ❑ Normal ❑ Tendinosis ❑ Tear	
Supraspinatus Tendon	Continuity ❑ Normal ❑ Tendinosis ❑ Tear	
Infraspinatus Tendon	Continuity ❑ Normal ❑ Tendinosis ❑ Tear	
Teres Minor Tendon	Continuity ❑ Normal ❑ Tendinosis ❑ Tear	
AC Joint	❑ Normal ❑ Abnormal	
GH Joint	❑ Normal ❑ Abnormal	
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 KMC CMC TMC NHSC

KIC MIC PI TI

MFP SFP Other

US Shoulder Worksheet

Name / MR # / Label

Depending on clinical presentation, exam may involve complete assessment of 1 of 4 quadrants described below or may be focused on specific structure

1. Anterior
   - Long and short images of humeroradial and humeroulnar joints
   - Long and short images of coronoid and radial fossa
   - Dynamically evaluate annular recess of neck of radius with forearm pronation and supination
   - Radial and median nerve if clinically warranted
   - Distal Biceps tendon attachment to radial bicipital tuberosity
     - Medial, lateral, and dorsal approaches may also be useful to evaluate distal biceps tendon
     - Evaluate for distal biceps attachment abnormalities or tendon tear
   - Evaluation of brachialis muscle and adjacent radial and brachial vessels if clinically warranted
2. Lateral
   - Common Extensor Tendon
     - Greater than 4.2 mm indicative of tendinosis
   - Lateral (Radial) Collateral Ligament
     - Dynamic testing with hand in pronation to supination to test integrity of RCL
   - Proximal attachments of extensor carpi radialis longus and brachioradialis
   - Radial nerve including its deep branch entering supinator muscle
3. Medial
   - Common Flexor Tendon
     - Evaluate for tendinosis
   - Ulnar Collateral Ligament
     - Dynamic test by adding valgus force to wrist with elbow slightly flexed to test integrity
     - Greater than 2 mm distance between medial epicondyle and ulna indicative of UCL abnormality
   - Ulnar Nerve
     - Ulnar nerve in cubital tunnel between olecranon process and medial epicondyle
     - Max cross-sectional area 10 mm^2
     - Dynamic imaging with elbow in flexion and extension to test for subluxation
4. Posterior
   - Triceps tendon
   - Posterior joint space
   - Olecranon fossa and fat pad
   - Olecranon bursa

Elbow Worksheet

SONOGRAPHER NOTES

INDICATIONS	DATE/TIME	
	SONOGRAPHER	

			Additional Findings/Limitations
Anterior	Joint Space	❑ Normal ❑ Abnormal	
	Distal Biceps Tendon	❑ Normal ❑ Abnormal	
Lateral	CET	❑ Normal ❑ Abnormal	
	RCL	❑ Normal ❑ Abnormal	
Medial	CFT	❑ Normal ❑ Abnormal	
	UCL	❑ Normal ❑ Abnormal	
Ulnar Nerve/ Cubital Tunnel	_____ mm^2		
	Dynamic	❑ Normal ❑ Abnormal	
Posterior	❑ Normal	❑ Abnormal	

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	KMC	CMC	TMC	NHSC
KIC	MIC	PI	TI	
MFP	SFP	Other		

US Elbow Worksheet

Name / MR # / Label

Clinical Protocol

Hand and Wrist

Depending on clinical presentation, exam may involve a complete assessment of 1 or more of 3 quadrants described below or may be focused on specific structure

1. Volar Wrist
   - Carpal tunnel to include Flexor Retinaculum, Flexor Digitorum Superficialis and Profundus tendons, Flexor Pollicis Longus tendon
   - Median nerve in carpal tunnel with the scaphoid and pisiform as bony landmarks
     - Median Nerve SAX
     - Wrist to Forearm Ratio
       - Area of median nerve performed in SAX
       - Wrist measurement performed at crease of wrist
       - Forearm measurement of nerve between FDS and FDP muscles approximately 12 cm proximal to measurement 1
       - If median nerve wrist/forearm ratio (WFR) > than 1.4, then suspicious for CTS
     - Median Nerve LAX
   - Palmaris Longus tendon superficial to retinaculum
   - Flexor Carpi Radialis tendon and radial artery
     - Evaluate for occult ganglion cysts
   - Ulnar Nerve and Ulnar artery Guyon's Canal
   - Flexor Carpi Ulnaris tendon
2. Dorsal Wrist
   - Examine compartment in SAX and LAX and evaluate statically and dynamically with finger flexion and extension
     - Compartment 1 APL/EPB
     - Compartment 2 ECRL/ECRB
     - Compartment 3 EPL
     - Compartment 4 EIP/EDC
     - Compartment 5 EDM
     - Compartment 6 ECU
   - Extensor retinaculum
   - Scapholunate ligament
     - Evaluate for tears and ganglion cyst
   - Carpal-Metacarpal Joint as indicated
     - Evaluate for synovial hypertrophy, cortical irregularities, effusion
   - Dorsal Metacarpophalangeal Joint (1^{st}-5^{th}) as indicated
   - Other joints of the dorsal wrist as clinically indicated
3. Ulnar
   - Triangular Fibrocartilage Complex LAX and SAX
     - Collateral ligament
     - Meniscal Homologue
   - Extensor Carpi Ulnaris tendon viewed in supination and pronation to assess for subluxation

Hand and Wrist Worksheet

SONOGRAPHER NOTES

INDICATIONS	DATE/TIME	
	SONOGRAPHER	

	Additional Findings/Limitations
Volar Wrist	❑ Normal ❑ Abnormal Median nerve _____ mm^2 at wrist _____ mm^2 at forearm _____ W/F Ratio
Dorsal Wrist	❑ Normal ❑ Abnormal
Ulnar Wrist	❑ Normal ❑ Abnormal
Wrist Joints (as indicated)	❑ Normal ❑ Abnormal

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 KMC CMC TMC NHSC

KIC MIC PI TI

MFP SFP Other

US Hand and Wrist Worksheet

Name / MR # / Label

Clinical Protocol

Knee

Depending on clinical presentation, exam may involve complete assessment of 1 of 4 quadrants described below or may be focused on specific structure

1. Anterior Knee
   - Quadriceps tendon SAX/LAX
   - Patellar tendon SAX/LAX
   - Patellar retinacula
   - Suprapatellar recess
   - Distal femoral trochlear cartilage
   - Prepatellar, superficial and deep infrapatellar bursae

2. Medial Knee
   - Medial collateral ligament
   - Pes anserine tendons and bursa
   - Medial patellar retinaculum
   - Anterior horn and body of the medial meniscus
     - W/valgus stress

3. Lateral Knee
   - Popliteus tendon
   - Biceps femoris tendon
   - Fibular collateral ligament
     - W/varus stress
   - Iliotibial band
   - Lateral patellar retinaculum

4. Posterior Knee
   - Popliteal fossa
   - Semimembranosus tendon
   - Medial and lateral gastrocnemius muscles
   - Posterior horns of meniscus
   - Possible PCL

Knee Worksheet

SONOGRAPHER NOTES

INDICATIONS	DATE/TIME	
	SONOGRAPHER	

			Additional Findings/Limitations
Anterior	Quad Tendon	❑ Normal ❑ Abnormal	
	Patellar Tendon	❑ Normal ❑ Abnormal	
	Femoral Trochlear Cartilage	❑ Normal ❑ Abnormal	
	Suprapatellar Recess	❑ Normal ❑ Abnormal	
	Bursae	❑ Normal ❑ Abnormal	
Medial	MCL	❑ Normal ❑ Abnormal	
	Medial Meniscus	❑ Normal ❑ Abnormal	
	Pes Anserine	❑ Normal ❑ Abnormal	
Lateral	LCL	❑ Normal ❑ Abnormal	
	Lateral Meniscus	❑ Normal ❑ Abnormal	
	Popliteus, BF, and ITB	❑ Normal ❑ Abnormal	
Posterior	Popliteal Fossa	❑ Normal ❑ Abnormal	

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 KMC CMC TMC NHSC

KIC MIC PI TI

MFP SFP Other

US Knee Worksheet

Name / MR # / Label

Depending on clinical presentation, exam may involve complete assessment of 1 of the 4 quadrants described below or may be focused on a specific structure

1. Anterior Ankle
   - Anterior tendons including tibialis anterior, extensor hallucis longus, extensor digitorum longus, and possibly peroneus tendon SAX/LAX
   - Anterior joint recess evaluate for effusion, loose bodies, and synovial thickening
   - Anterior joint capsule
   - Anterior inferior tibiofibular ligament

2. Medial Ankle
   - Posterior tibial, flexor digitorum longus, and flexor hallucis longus tendons located in order from anterior to posterior SAX/LAX
   - Tibial nerve
   - Deltoid ligament

3. Lateral Ankle
   - Peroneus brevis and longus tendons SAX/LAX
     - Peroneus longus followed to base of 1st metatarsal
     - Peroneus brevis followed to base of 5th metatarsal
     - Assess for subluxation with dorsiflexion and eversion
   - Anterior and posterior talofibular ligaments
   - Calcaneofibular ligament

4. Posterior Ankle
   - Achilles tendon SAX/LAX
   - Dynamic scanning with plantar and dorsiflexion
   - Plantaris tendon if seen
   - Retrocalcaneal bursa
   - Superficial retro Achilles bursa
   - Plantar fascia SAX/LAX

Ankle and Foot Worksheet

SONOGRAPHER NOTES

INDICATIONS	DATE/TIME	
	SONOGRAPHER	

			Additional Findings/Limitations
Anterior	TA/EHL/EDL tendons	❑ Normal ❑ Abnormal	
	Anterior joint recess	❑ Normal ❑ Abnormal	
	Anterior inferior tibiofibular ligament	❑ Normal ❑ Abnormal	
Medial	Posterior tibial tendon	❑ Normal ❑ Abnormal	
	Flexor digitorum longus	❑ Normal ❑ Abnormal	
	Flexor halluces longus	❑ Normal ❑ Abnormal	
	Tibial nerve	❑ Normal ❑ Abnormal	
	Deltoid ligament	❑ Normal ❑ Abnormal	
Lateral	Peroneous brevis and longus	❑ Normal ❑ Abnormal	
	Anterior/posterior talofibular ligaments	❑ Normal ❑ Abnormal	
	Cacaneofibular ligament	❑ Normal ❑ Abnormal	
Posterior	Achilles tendon	❑ Normal ❑ Abnormal	
	Plantar fascia	❑ Normal ❑ Abnormal	

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	KMC	CMC	TMC	NHSC
KIC	MIC	PI	TI	
MFP	SFP	Other		

Name / MR # / Label

US Ankle and Foot Worksheet

Limited MSK Worksheet

SONOGRAPHER NOTES

INDICATIONS	DATE/TIME	
	SONOGRAPHER	

	Additional Findings/Limitations
Structure(s) evaluated	

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 KMC CMC TMC NHSC

KIC MIC PI TI

MFP SFP Other

US Limited MSK Worksheet

Name / MR # / Label

Clinical Protocol

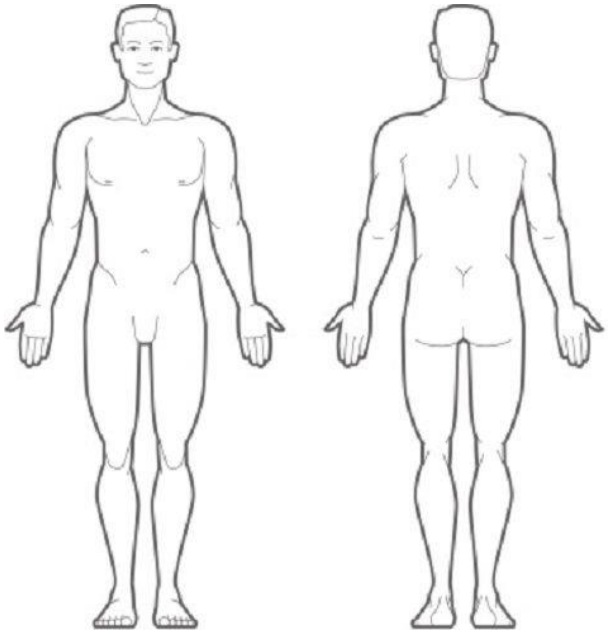
Soft Tissue Lesion/Non-Vascular Extremity

1. Long gray scale image of area of concern – no measurements.
2. Trans gray scale image of area of concern – no measurements.
3. Cine image of area of concern.
4. If abnormality present – long and trans grayscale images with three plane measurements.
5. If abnormality present – long and trans grayscale images with color Doppler.
6. If helpful, add spectral waveform analysis (no charge).
7. If helpful, image contralateral body part for comparison.

Soft Tissue Lesion/ Non-Vascular Extremity Worksheet

SONOGRAPHER NOTES

INDICATIONS	DATE/TIME	
	SONOGRAPHER	



Comments

Lesion 1	_____ x _____ x _____ cm Long AP Trans	Vascularity of Lesion 1 ❑ Increased ❑ Symmetric to surrounding tissues ❑ Decreased/None
Lesion 2	_____ x _____ x _____ cm Long AP Trans	Vascularity of Lesion 2 ❑ Increased ❑ Symmetric to surrounding tissues ❑ Decreased/None

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 KMC CMC TMC NHSC

KIC MIC PI TI

MFP SFP Other

US Soft Tissue Lesion/ Non-Vascular Extremity Worksheet

Name / MR # / Label