

ULTRASOUND PROTOCOLS

ABDOMINAL COMPLETE

LIVER

Complete visualization-longitudinal & transverse

Tissue texture (compared to rt kidney)

Portal vein measurement, direction of flow

GALL BLADDER

Supine, left lateral decub-longitudinal & transverse

GB wall measurement

Common bile duct size

PANCREAS

Transverse head, body, tail

AORTA

Longitudinal-prox, mid, distal measurements

KIDNEYS

Representative longitudinal, transverse images

Length

SPLEEN

Longitudinal, transverse images

Length

ABDOMINAL LIMITED

LIVER

Complete visualization-longitudinal & transverse

Tissue texture (compared to rt kidney)

Portal vein measurement, direction of flow

GALL BLADDER

Supine, left lateral decub-longitudinal & transverse

GB wall measurement

Common bile duct size

PANCREAS

Transverse head, body, tail

AORTA

Longitudinal-prox, mid, distal measurements

RT KIDNEY

Representative longitudinal, transverse images

Length

ELASTOGRAPHY

Done in conjunction with an US Abdomen Complete or US Abdomen Limited

4V1 Transducer

Fasting 4-6 hours

Patient Position:

Supine or slight (30°) Left Lat. Decub.

Right Arm Elevated above the head

Shallow breath hold

ROI Placement:

Right lobe of liver

Use intercostal transducer placement

Find a location with best B-mode image without shadowing

Avoid large liver vessels and/or bile duct and rib shadows

Measurements:

Eight to Ten Measurements obtained in the same location

(shear wave speed (Vs)) (m/s)

Mean

Median

Standard Deviation (SD)

Interquartile Ratio (IQR)

METAVIR score

Kilopascal (kPa) Median² x 3

RENAL/URINARY TRACT

KIDNEYS

Longitudinal, transverse measurements

Longitudinal-medial, lateral

Transverse-upper, mid, lower

Tissue texture/echogenicity

Color Doppler image of each kidney

BLADDER

Lumen, wall

Document urine jets

FEMALE PELVIS

TRANSVESICAL (through full bladder)

Longitudinal & transverse images uterus, ovaries (with measurements)

ENDOVAGINAL

Sagittal & coronal images cervix, uterus, ovaries, adnexa

Endometrium with endometrial stripe thickness measurement

Arterial, venous flow in ovaries

Cul-de-sac

AORTA

Longitudinal images with measurements (prox, mid, distal)

Transverse images with measurements (prox, mid, distal)

Bifurcation-longitudinal, transvers with measurements

Longitudinal measurement each kidney

SCROTUM

Longitudinal, transverse images of each testicle with measurements

Epididymis images with measurements of epididymal heads

Arterial, venous flow in each testicle

Peritesticular vein size-relaxed & valsalva

THYROID

Longitudinal, transverse measurements

Longitudinal-lateral, medial

Transverse-upper, mid, lower

Isthmus thickness measurement

Document blood flow with color Doppler both lobes

DVT-LOWER EXTREMITY

TRANSVERSE (with & without compression)

CFV /GSV junction

SFV-upper, mid, lower POP

LONGITUDINAL DOPPLER

EIV-CFV-prox PFV, SFV

(upper, mid, lower)-pop v

Calf veins (peroneal, ptvs)

Evaluate pop fossa for Baker's cyst

Evaluate CFV contra lateral side

DVT-UPPER EXTREMITY

TRANSVERSE (with & without compression)

IJV, axillary, brachial upper, mid, lower),
basilic

DVT-UPPER EXTREMITY Continued

LONGITUDINAL

IJV, subclavian (Prox, mid, dist), axillary,
brachial, basilica

Document IJV contralateral side

CAROTID ARTERIES

TRANSVERSE:

CCA prox, distal

Bulb

Bifurcation

LONGITUDINAL:

CCA prox, mid, distal

Bulb

ICA

ECA

ANGLE ADJUSTED SPECTRAL DOPPLER:

CCA prox, distal

ICA prox, mid, distal

ECA

Subclavian, vertebrals-document
direction of flow