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

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
Longitudial, 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