

## UT Southwestern Department of Radiology

### **Ultrasound –Abdomen Limited or Lower Extremity (If Groin) for Hernia Evaluation**

#### **PURPOSE:**

To evaluate for hernias of the anterior abdominal wall or inguinal region.

#### **SCOPE:**

Applies to all ultrasound studies performed for the evaluation of abdominal or inguinal hernias at Imaging Services / Radiology

#### **INDICATIONS:**

- Signs (example: mass) or symptoms (examples: pain, fullness) associated with hernia
- Abnormal findings on other imaging studies
- Follow up known hernia

#### **CONTRAINDICATIONS:**

No absolute contraindications

#### **EQUIPMENT:**

Linear array transducers with a frequency range of 9-15 MHz and large field of view (5 cm). Linear, sector, or curvilinear transducers with a frequency range of 2-9 MHz may be required for appropriate penetration and resolution depending on patient's body habitus.

#### **PATIENT PREPARATION:**

- None

#### **EXAMINATION:**

#### **GENERAL GUIDELINES:**

A complete examination includes evaluation of the region corresponding to the patient's signs or symptoms.

#### **EXAM INITIATION: AIDET**

- Introduce yourself to the patient
- Verify patient identity using patient name and DOB
- Explain test
- Obtain patient history including symptoms. Enter and store data page
- Place patient in supine and/or standing position

# UT Southwestern Department of Radiology

## **TECHNICAL CONSIDERATIONS:**

- Review any prior imaging, making note of associated abnormalities requiring evaluation.
- Images should be taken with and without Valsalva maneuver, with proper annotation.
- Images should be taken at area of interest in supine and standing position with proper annotation.
- Hernia sac and hernia neck should be documented with size measurements.
- Contents of the hernia sac (bowel, fluid, etc.) should be evaluated. For instance, detection of bowel gas and peristalsis indicate a bowel-containing hernia.
- Evaluated for reducibility, tenderness, and change in overlying skin color (erythema).
- Fat/omental herniation may appear indistinct from the surrounding subcutaneous fat. Higher frequency transducer and movement of fat during Valsalva can help discern the two.

## **DOCUMENTATION:**

- Longitudinal images:
  - Representative images with measurements included if abnormal
  - For inguinal hernias:
    - Repeat in standing or upright position, if able
- Transverse images:
  - Representative images of the palpable or sonographic measurements included if abnormal
  - For inguinal hernias:
    - Identify internal iliac artery at origin with the external iliac artery.
- Identify spermatic cord
- Cine images:
  - Dynamic images during Valsalva showing hernia if positive.

## **PROCESSING:**

- Review examination images and data
- Export all images to PACS
- Document relevant history and any study limitations in Primordial
- End Exam

## **REFERENCES:**

Siegel, Marilyn, (2002). Pediatric Sonography. Philadelphia, PA: Lippincott Williams and Wilkins.

## **REVISION HISTORY:**

UT Southwestern Department of Radiology

<b>SUBMITTED BY:</b>	<b>Christy Baez, RDMS, RVT</b>	<b>Title</b>	<b>Ultrasound Team Leader-Dallas</b>
<b>APPROVED BY:</b>	<b>Jeannie Kwon, M.D.</b>	<b>Title</b>	<b>Director of Ultrasound</b>
<b>APPROVAL DATE:</b>	<b>1/23/2019</b>		
<b>REVIEW DATE(S):</b>	<b>08/26/2019</b>		
<b>REVISION DATE(S):</b>	<b>2/4/2019</b>	<b>Brief Summary:</b>	