PROSTATE ULTRASOUND EXAMINATION

POLICY: Prostate ultrasound will be performed with an order from a physician or other qualified clinical practitioner. The examination will be supervised and interpreted by a radiologist or other licensed practitioner who is qualified by reason of training to understand the normal anatomy, pathophysiology of the abdomen, and integration of ultrasound with other imaging techniques to optimize the probability of detecting disease.

PURPOSE: To assess the anatomy of the prostate gland and surrounding structures and to document normal and abnormal findings

INDICATIONS: Ultrasound of the prostate is indicated for patients with an abnormal digital rectal exam or serum prostate specific antigen (PSA) level. Infertility may also be an indication for prostate ultrasound. Prostate ultrasound may also be used to guide biopsy of the prostate and/or treatment of prostate cancer.

PATIENT PREPARATION: Patients require no special preparation prior to arriving for the prostate ultrasound. However, patients will be asked to administer a Fleet's enema immediately prior to beginning the examination.

PROCEDURE: The prostate gland and surrounding structures will be imaged from an endorectal approach utilizing an endocavitary transducer of the highest frequency that allows adequate tissue penetration. An endorectal probe must be covered by a disposable sheath and disinfected after completing the examination. Lidocaine or ultrasound gel can be used as a lubricant. A digital rectal exam may also be performed prior to imaging. The prostate gland should be imaged in its entirety (e.g. long and transverse views) and include the adjacent soft tissue structures such as the seminal vesicles. The order of organ imaging will be (minimal number of images in parenthesis):

- Long axis left and right prostate (8 images and 1 cine)
- Short axis left and right prostate (7 images and 2 cines)
- Long and short axis left seminal vesicle (2 images)
- Long and short axis right seminal vesicle (2 images)

PROSTATE:
The prostate gland should be evaluated for echogenicity, symmetry, continuity of margins and presence of focal mass. Long axis views must include the base and apex of the gland, so additional images and cine sweeps may be necessary in a large prostate.
- Minimal stored images should include:
three long axis views of the left side of the prostate gland – lateral, mid, and medial – labeled long left lat, long left mid, and long left med respectively;

one long axis midline view of the prostate gland and urethra labeled long midline;

three long axis views of the right side of the prostate gland – medial, mid, and lateral – labeled long right med, long right mid, and long right lat respectively;

one long axis cine sweep of the prostate gland from left to right labeled long left-right;

one long axis view of the prostate gland optimized for measuring the entire gland in two dimensions labeled long;

one short axis view of the prostate gland optimized for measuring the entire gland in one dimension labeled trans. A volume should be calculated and reported using the three obtained measurements;

three short axis views of the left side of the prostate gland – base, mid, and apex – labeled trans left base, trans left mid, and trans left apex respectively;

one short axis cine sweep of the left side of the prostate gland from base to apex labeled trans left base-apex. The left seminal vesicle should be included;

three short axis views of the right side of the prostate gland – base, mid, and apex – labeled trans right base, trans right mid, and trans right apex respectively;

one short axis cine sweep of the right side of the prostate gland from base to apex labeled trans right base-apex. The right seminal vesicle should be included.

SURROUNDING STRUCTURES:
The seminal vesicles should be evaluated for size, shape, position, symmetry and echogenicity. They should be assessed from their superiolateral tips to where they taper and insert into the prostate gland via the ejaculatory ducts. In patients evaluated for infertility, the vasa deferentia and anterior perirectal space should be evaluated as well.

Minimal stored images should include:

one long axis view of the left seminal vesicle labeled long left seminal vesicle;

one short axis view of the left seminal vesicle labeled trans left seminal vesicle;

one long axis view of the right seminal vesicle labeled long right seminal vesicle;

one short axis view of the right seminal vesicle labeled trans right seminal vesicle.