Abdominal and Small Parts

OCCULT CANCER IN WOMEN WITH DENSE BREASTS: DETECTION WITH SCREENING US—DIAGNOSTIC YIELD AND TUMOR CHARACTERISTICS

KOLB TM, LICHY J, NEWHOUSE JH

Radiology 1998;207(1):191-199

(Department of Radiology, Columbia—Presbyterian Medical Center, College of Physicians and Surgeons Columbia University, New York, NY)

Our study was conducted to evaluate bilateral screening ultrasound (US) in the detection of otherwise occult masses and cancer in women with dense breasts and normal mammographic and physical examination findings. Of 11,220 consecutive patients prospectively examined, all 3,626 women with dense breasts and normal mammographic and physical examination findings underwent physician-performed screening US. The size and stage of cancers detected with US alone were compared with those of cancers detected on mammograms, at physical examination, or both, in the remainder of the patients. In the group of 3,626 women, 11 surgically proved cancers in 11 women (prevalence, 0.30%) were identified with US alone. These cancers were not statistically significantly different in mean surgical size and stage from those of 61 nonpalpable, mammographically detected cancers and were smaller and lower in stage than 64 palpable cancers (p < 0.01) that were diagnosed in the remainder of the population. In the women with dense breasts, overall cancer detection increased by 17% (from 63 to 74 tumors), and the number of tumors detected only with imaging increased by 37% (from 30 to 41 tumors). Screening US can depict small, early-stage, otherwise occult cancers similar in size and stage to mammographically identified nonpalpable cancers and smaller and lower in stage than palpable cancers in dense breasts.

Authors' abstract

TRANSRECTAL US IN MALE INFERTILITY: SPECTRUM OF FINDINGS AND ROLE IN PATIENT CARE

KULIGOWSKA E, FENLON HM

Radiology 1998;207(1):173-181

(Department of Radiology, Boston Medical Center, Boston University School of Medicine, Boston, MA 02118)

Our study was done to determine the findings at transrectal ultrasound (US) in infertile men with low-volume azoospermia and to evaluate its role in patient care. Transrectal US was performed on 276 infertile men with a mean age of 34 years (range, 24 to 52 years) who had documented low ejaculate volumes and azoospermia. Of the 276 men, 70 (25.4%) had no anatomic abnormalities. In the remaining patients, abnormalities included congenital bilateral absence of the vas deferens in 94 (34.1%) patients; bilateral occlusion of the vas deferens, seminal vesicles, and ejaculatory ducts by calcification or fibrosis in 43 (15.6%) patients; unilateral absence of the vas deferens in 31 (11.2%) patients; obstructing cysts of the seminal vesicles, vas deferens, ejaculatory ducts, or prostate in 26 (9.4%) patients; and ductal obstruction secondary to calculi in 12 (4.4%) patients. We found transrectal US to be a safe and accurate method for evaluating the distal male reproductive tract that helps identify patients with potentially correctable causes of infertility.

Authors' abstract

SONOGRAPHY OF TESTICULAR TUMORS AND TUMOR-LIKE CONDITIONS: A RADIOLOGIC-PATHOLOGIC CORRELATION

GERAGHTY MJ, LEE FT JR, BERNSTEN SA, GILCHRIST K, POZNIAK MA, YANDOW DJ

Crit Rev Diagn Imaging 1998;39(1):1-63

(Department of Radiology, University of Wisconsin Hospital and Clinics, Madison, WI 53792-3252)

Malignant testicular tumors are an important clinical problem, and ultrasound is the most frequently ordered imaging modality once a palpable scrotal mass is discovered. Numerous articles discussing the role of ultrasound in the evaluation of testicular pathology have confirmed the value of preoperative imaging. This article presents a review of imaging literature regarding testicular neoplasms, with an emphasis on correlation of gross and microscopic tumor pathology and imaging findings. Also included are sections on anatomy, epidemiology, histogenesis, and tumor markers.

Authors' abstract