

INTRODUCTION

Acute pelvic pain is generally considered to be pain that is of less than about 3 months duration. Patients with acute pelvic pain can be categorized into patients with a positive versus those with a negative pregnancy test (beta-human chorionic gonadotropin) (**Van&Puylaert 2006**).

The most common gynecological causes of acute abdominal pain are, hemorrhagic ovarian or corpus luteum cyst, ovarian and adnexal torsion, endometriosis, gynecologic neoplasm, degenerating leiomyoma, adenomyosis, pelvic congestion syndrome, pelvic inflammatory disease, pelvic abscess, pelvic arterio-venous malformation, premenstrual syndrome, appendicitis, renal stone with obstructive uropathy, and inguinal and other hernias (**Lamvu& Steege 2006**) .

Trans-vaginal ultrasonography (TVUS) is the mainstay of imaging evaluation at initial presentation .Its strengths includes absence of radiation ,rapid availability of machines in hospitals ,and excellent visualization of the pelvic organs. Improvements made in image quality have facilitated the rapid and accurate diagnosis of the majority of gynecological causes of acute pelvic pain (**Salem&Wilson 2005**) .

Although ultrasonography is the primary imaging modality of choice for the evaluation of acute pelvic pain in the female patient, the role of computed tomography (CT) in the evaluation of abdominal and pelvic pain continues to expand. CT may be performed if US findings are equivocal or if the abnormality extends beyond the field of view of the endo-vaginal

probe and further characterization is required. Although clinical findings and correlation with β -human chorionic gonadotrophin (HCG) levels frequently indicate a gynecological disorder, it may be unclear whether the cause of symptoms is primarily gynecologic or is related to the gastrointestinal or genitourinary tract. CT plays a particularly important role in the evaluation of patients with suspected pelvic abscess or hematoma, post partum complications, or complications related to pelvic inflammatory disease and the exclusion of bowel disease (*Woodward et al.,2001*).

MDCT is a technologic advance that allows simultaneous acquisition of multiple images during a single rotation of the X-ray tube (*Paulson et al.,2003*).

Female pelvic anatomy and abnormality may be difficult to characterize using axial images. In particular, it is difficult to delineate the adnexal structures from the uterus, pelvic side wall, and small and large bowels (*Ahn et al.,2002*).