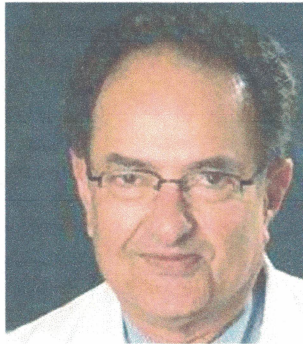


# GRASPING AN ELUSIVE DIAGNOSIS PROBING THE MYSTERY OF UNDIAGNOSED GROIN, LOWER ABDOMINAL AND PELVIC (UGAP) PAIN.



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Though “Undiagnosed groin, lower abdominal and pelvic” (UGAP) pain is a common condition, it has received insufficient clinical attention. The volume of patients, as well as the condition’s economic impact is staggering. In the US alone millions of patients are reported as having UGAP pain. Nearly 15 million women have chronic pelvic pain (CPP)<sup>2</sup>, and in this subset 46%

have dyspareunia. The annual medical cost of diagnosis and treatment is almost \$1.2 billion. And the cost of lost productivity is an estimated \$15 billion per year. Interstitial cystitis affects half a million to one million people in the US, causing CPP<sup>4</sup>. Sportsman’s hernia affects 0.5–6.2% of all professional athletes.<sup>3</sup> Also, nearly 17% of patients suffer from late groin pain following repair of groin hernias.

UGAP mimics several different conditions. In females it can present as vulvodynia, interstitial cystitis, and CPP, including dyspareunia. In males, it may present as radiating pain to the testis, abacterial prostatitis, and sportsman’s hernia. In both males and females, it can present as acute or chronic lower abdominal and/or groin pain, mimicking appendicitis, diverticulitis, and groin hernias. Several patients have reported rectal symptoms of spasms and irritable bowel syndrome. Also, some have anal, lower back, gluteal, perineal, coccygeal, and/or hip pain. These unfortunate patients, are shuttled from one specialist to another and undergo expensive diagnostic tests (e.g., CT scans, MRIs, bone scans, ultrasounds). Endoscopies, laparoscopies, and sometimes unnecessary surgeries (e.g., exploratory laparotomy, hysterectomy, inguinal herniorrhaphy) are performed. Countless healthcare dollars are spent on unnecessary diagnostic studies and unnecessary interventions. Patients and physicians are equally frustrated because the diagnosis

is elusive. Chronic pain causes emotional problems, sleep disturbances, low self-esteem, and even depression.

The first step to approach this condition is appropriate diagnosis. In the majority of these patients, diagnosis is strongly suspected just by clinical examination; few patients need expensive diagnostic work. Thorough local exam of the lower abdomen, groin, and pelvis is helpful. I have come up with the following innovative signs, which have been helpful during my 30 years of practice. Final confirmation is conducted by administering a series of steroid injections and observing the patient’s response.

In females: Wasu triad signs

- Rectus flexion sign—examiner’s hand is placed on the insertion of the rectus muscle over the pubic bone, and if the patient experiences severe pain on flexion of the rectus muscle when attempting to sit up it is considered positive sign. (Figure 1).
- Adductor resistance sign<sup>1</sup>— It is considered positive if patient experiences pain when the examiner places a finger over the insertion of the adductor longus tendon and asks the patient to adduct the bent knee against the assistance hand.
- Vaginal hook sign—If patient experiences pain on vaginal exam and hooking fingers anteriorly over the pubic bones then this is considered positive sign.



Figure 1. Rectus flexion sign and Vaginal hook sign

In males: Wasu triad plus signs

- Rectus flexion sign
- Adductor resistance sign
- Spermatic cord traction sign—patient is examined in a standing position on traction of the spermatic cord and experiences pain over the pubic bone; however, on lying down there is no tenderness over the spermatic cord. This is considered positive sign
- Paraprostatic sign—on digital rectal exam, most of the time there is mild or no pain over the prostate gland. However, on examination lateral to the prostate gland, if there is tenderness, this suggests the patient has CPP, also known as abacterial prostatitis

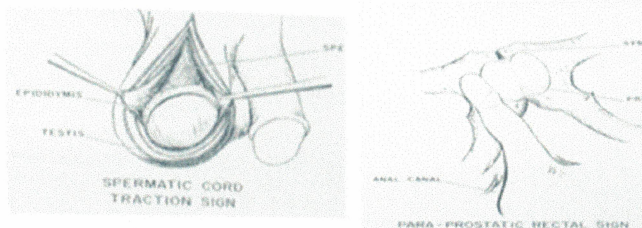


Figure 2. Spermatic cord traction sign and Paraprostatic rectal sign