

# Laparoscopic Repair of Sportman's Hernia – The Trinidad Experience

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*Sportman's hernia:* (Athletic pubalgia) is an uncommon and poorly understood condition afflicting athletic individuals. Sufferers complain of chronic groin pain and often present diagnostic dilemmas to physicians and physiotherapists. We present a series of cases illustrating the varying presentations of sportman's hernia and diagnostic approaches that can be utilized to exclude common differentials. We also describe laparoscopic mesh repair as an effective treatment option for this condition.

**Key Words:** Sportman's hernia ■ Athletic pubalgia ■ laparoscopic ■ mesh repair

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## INTRODUCTION

Sportsman's hernia (SH) is an important cause of groin pain among competitive athletes. It is a unique condition that is often incorrectly diagnosed and treated (1). The insidious presentations of this ailment can mimic other afflictions involving the inguinal region, groin and hip joint areas. As such, sufferers are commonly subjected to a battery of tests, investigations and often erroneous treatments before correct diagnosis and management are discovered (2). We support the theory that SH can be successfully treated by laparoscopic reinforcement of the posterior inguinal wall. This case series describe four patients who were diagnosed with SH and demonstrated successful outcomes after laparoscopic hernia repair. This represents the first case series to be described within the Caribbean region.

## CASE REPORTS

### Case 1

A 21-year old right handed collegiate football player currently playing soccer in the USA presented to hospital with a 3-month history of left groin pain. His pain began insidiously while kicking a ball at the end of a long training session. He described the pain as a dull aching in his groin and adductor region. He was unable to continue playing and sought treatment from an athletic trainer who made a provisional diagnosis of a "groin strain" and treatment was initiated. Symptoms, however, improved only minimally. He was able to jog along

a straight line but was limited in his ability to cut and change direction or particularly, kick a football. His pain score on a visual analogue scale (VAS) was 7 out of 10. He described no history of clicking sounds, sharp catching type pain or instability within the hip region. There was no aggravation of his pain with coughing or sneezing and he described no bowel or genito-urinary symptoms. He had no previous episodes of low back pain.

Examination revealed a normal gait pattern. The lumbar spine revealed no clinical abnormalities. Trendelenburg's sign was negative. The impingement test for labral lesions was negative. Pain on active isometric contraction or passive stretch of the rectus abdominis, ilio-psoas and rectus femoris muscles was negative. There was minimal pain on testing the adductor group of muscles but there was no differentiation on testing of the individual adductor muscles. He had no significant tenderness on palpation of the adductor tendon, pubic tubercle, or inguinal ligament. The superficial inguinal ring was not significantly dilated on digital examination; however, manual palpation of the posterior inguinal wall in the region of Hesselbach's triangle did reproduce some symptoms. Functional testing did reveal poor core and pelvic girdle stability on a one-legged squat test. There was no discernible cough impulse.

Magnetic resonance imaging (MRI) investigations included intra-articular contrast injection into the left hip, which revealed no evidence of a labral lesion. In addition there was no evidence of pubic tubercle oedema. The rectus abdominis, iliopsoas and adductor group of muscles showed normal signal intensity with no evidence of acute or previous injury. Figure 1 shows the MRI.

Based on the above presentation a diagnosis of a sportsman's hernia was made.

Physiotherapy had been continued during the 3-month period prior to consultation. Pain and limitations of function, unfortunately, continued. In light of continued failure of conservative management surgical intervention was planned. This consisted of a Laparoscopic Trans-Abdominal Preperitoneal (TAPP) mesh repair using one 10mm port for the telescope and two other 5 mm ports. A 15 cm × 12 cm mesh was utilised to cover the entire myopectineal orifice in the space of Bogros on the patient's left side. His post operative recovery