

Case Presentation for Polycystic Ovarian Syndrome

HANNAH M. LATTANZIO, VERED ARBEL, TERRY NICOLA and TAL AMASAY

Department of Kinesiology & Nutrition & Sports Medicine & Human Performance Center; University of Illinois at Chicago

Category: Undergraduate Student

ABSTRACT

CASE HISTORY: The patient is a fourteen-year-old female who presented to the clinic for bilateral hip and lumbar back pain. She stated that the pain has been present for approximately seven months and described it as a deep ache in the low back and both hips anteriorly. The patient said she plays a variety of sports but denies any specific event that could contribute to her pain. She stated her pain is worse with prolonged walking, standing, and sitting. Additionally, the patient mentioned her first menstrual cycle lasted fifty-six days and she has since not had any following menses, indicating secondary amenorrhea. Secondary amenorrhea is characterized by the cessation of irregular menses for six months and is commonly caused by hormonal imbalances. **PHYSICAL EXAM:** Examination of the hip, abdomen, and back did not demonstrate any deformities. She had tenderness to palpation at the mid-abdomen and at the insertion of the hip flexors, at the ASIS and AIIS bilaterally. Her patellar reflex was normal and 5/5 strength in hip flexion, extension, and abduction was observed along with full range of motion of both hips. FABER and FADIR tests were conducted and resulted in a positive sign of pain for both tests. **DIFFERENTIAL DIAGNOSES:** Hip dysplasia, Slipped capital femoral epiphysis, Polycystic Ovarian Syndrome, Femoroacetabular impingement, and Snapping hip. **TESTS & RESULTS:** Patient had an x-ray of both hips that were negative for tissue abnormalities. A pelvic MRI suggested small areas of subchondral sclerosis and possible polycystic ovaries. **FINAL DIAGNOSIS:** Polycystic Ovarian Syndrome (PCOS). **DISCUSSION:** PCOS is a common endocrine disorder that effects an estimated 10% of women between the ages of fifteen to forty-four, though it is commonly diagnosed in adolescence to early twenties. PCOS is diagnosed when two of the following criteria are evident: menstrual irregularity, polycystic ovaries and/or symptoms of androgen excess. Though pain is not an indicator of PCOS, it is not uncommon, and presentation varies widely to include abdominal, anterior pelvic, and low back pain. PCOS is believed to be caused by genetics but is greatly influenced by lifestyle factors and is associated with many morbidities including obesity, insulin resistance, and depression. Management of PCOS consists of controlling the symptoms of androgen excess and/or the absence of ovulation, and to reduce the chances of long-term complications such as infertility, metabolic syndrome, and type two diabetes. Oral contraceptives are the most common treatment for menstrual irregularity in adolescents. Androgen excess is managed with a combination of cosmetic management, oral contraceptives, and anti-androgen therapy, such as cyproterone acetate. Prevention of long-term complications include diet and lifestyle changes to reduce the risk of developing type two diabetes. Metformin may also be an effective treatment for both type two diabetes and androgen excess. **OUTCOME OF THE CASE:** Patient was referred to physical therapy to include protective range of motion and exercise of hip flexors. She continued to take Diclofenac for pain. **RETURN TO ACTIVITY AND FURTHER FOLLOW-UP:** The patient will follow-up with endocrinology and gynecologist for questionable polycystic ovarian syndrome due to polycystic ovaries present on the hip MRI and elevated testosterone levels. An x-ray without contrast of bilateral hips will be obtained to evaluate bony anatomy and she will return to the clinic in 4-6 weeks to follow-up on symptoms and discuss the imaging findings.