

## Case Study

The patient with the initials HJ is a 26-year-old female who presented to the hospital for bilateral hip and lower back pain. The patient self-report indicated that the pain experienced has been present for about 8 months and delineated it as a deep ache which is located in the low back and both hips anteriorly. On a pain scale, she rated the pain as 8/10. Her pain is aggravated when she engages in physical activities which include walking, running, and extended standing. Patient history indicated that her first menstrual cycle lasted beyond 34 days and she has since not experienced any menses which represents the presence of secondary amenorrhea (Lord & Sahni, 2021; Nawaz & Rogol, 2021). The absence of menstruation during the female during the reproductive ages of approximately 12 to 49 years is known as amenorrhea.

### Differential Diagnosis

- Polycystic Ovarian Syndrome - Polycystic ovary syndrome (PCOS) is currently the leading cause of menstrual complications in women (Bednarska & Siejka, 2017). It is characterized by clinical and/or biochemical hyperandrogenism, ovulation abnormalities, and the presence of enlarged and/or polycystic ovaries in ultrasound images (12 or more small bubbles located circumferentially and/or ovarian volume > 10 mL). It is often comorbid with hyperinsulinemia, dyslipidemia, overweight or obesity, and is a risk factor for the development of diabetes and cardiovascular diseases (CVDs).
- Hip dysplasia – a condition where the ball and socket of the joint do not properly form in babies and young children (Yang et al., 2019). However, this can be ruled out because it does not have any direct impact on menses.
- Femoroacetabular impingement – This is a condition where the hip joint is not shaped normally (Bech & Haverkamp, 2018). This causes the bones to painfully rub together.