

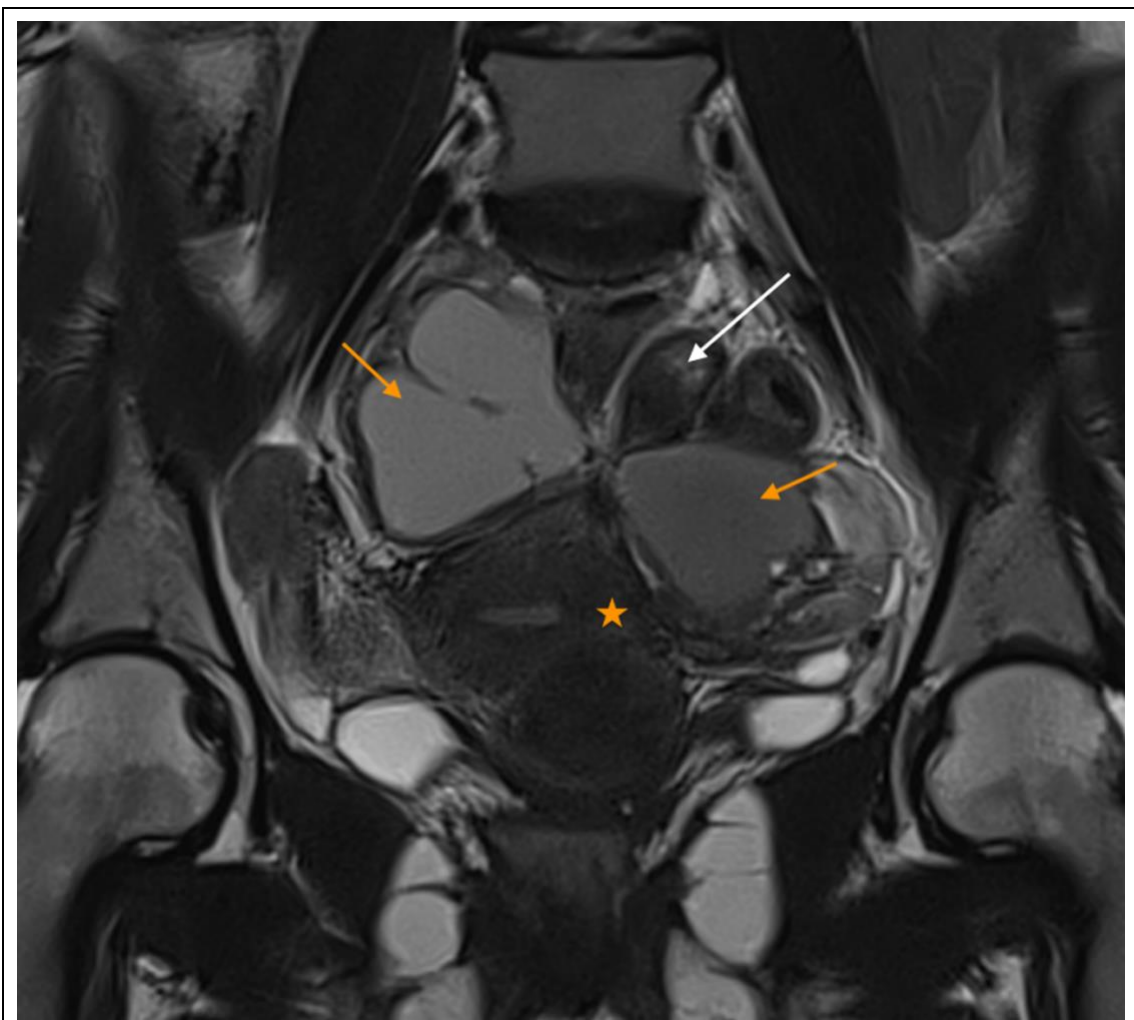
## The Cloverleaf Sign in Deep Infiltrating Endometriosis

M Jidal\*, S El Haddad, N Allali and L Chat

Radiology Department, Children's Hospital, Rabat, Morocco

\*Corresponding author: M Jidal, Radiology Department, Children's Hospital, Rabat, Morocco. E-mail: [manaljid@gmail.com](mailto:manaljid@gmail.com)

Received: January 20, 2024; Accepted: February 06, 2024; Published: February 15, 2024



Coronal T2-weighted plane showing a cloverleaf-like formation; the “leaves” being the uterus (star), the ovaries (orange arrows) and the sigmoid colon (white arrow) making the loops.

## **Clinical Image**

Ms. A, a 34-year-old nulligravida, presented to the gynecology clinic with a chief complaint of severe pelvic pain and difficulty conceiving for the past two years. The pain was cyclical, worsening during menstruation, and associated with dyspareunia. A pelvic MRI revealed deep infiltrating endometriosis and the presence of the "cloverleaf sign."

## **Discussion**

Endometriosis is a chronic disease affecting around 10% of reproductive-age women and is defined by the presence of endometrial tissue outside the uterine cavity, causing severe pelvic pain and infertility. Deep infiltrating endometriosis is defined as subperitoneal invasion that exceeds 5 mm in depth. The diagnosis of endometriosis was based on laparoscopy and biopsy for decades, but nowadays, MRI allows non-invasive and accurate staging of DIE [1].

The cloverleaf sign in deep infiltrating endometriosis is a recently described MRI sign that is highly suggestive of a more complex surgery, a greater risk of bowel resection, and blood loss. It is detectable on T2W sequences in sagittal, coronal, and axial planes. The cloverleaf is formed by at least three organs brought closer by constrictive adhesions and detectable T2-weighted hypointense deep infiltrating endometriosis. Therefore, its presence should call for better preoperative planning [2].

## **REFERENCES**

1. Fan J, McDonnell R, Jacques A, et al. MRI sliding sign: Using MRI to assess rectouterine mobility in pelvic endometriosis. *J Med Imaging Radiat Oncol.* 2022; 66: 54-59.
2. Härmä, K, Binda A, Ith M, et al. Cloverleaf Sign in Pelvic Magnetic Resonance Imaging for Deep Infiltrating Endometriosis. *Investigative Radiology.* 2020; 55: 53-59.