

Objetivo

- To compare and characterize High Definition Nuclear Magnetic Resonance (HDNMR) imaging diagnosis in
- clinically suspected deep infiltrating endometriosis (DIE) patients with laparoscopic findings.

Design

Prospective consecutive research and blind comparison to a gold standard – laparoscopy (LPCY).

Detalles del procedimiento

Thirty seven clinically suspected DIE patients (16/48 years), between 2012/2016. HDNMR performed with a 1.5 T device.

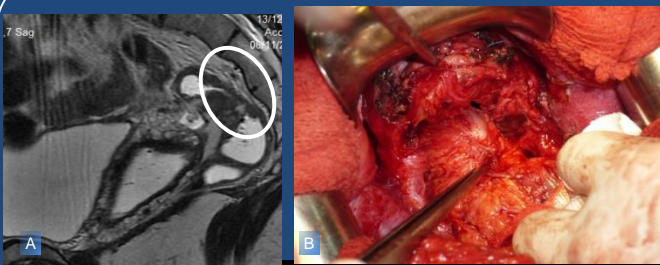
Preparation: saline enema, N-butylbromure hyoscine, four hour fasting.

Protocol: T1 fat saturation sequences (axial, sagittal), T2 (axial, sagittal, coronal), T1 fat saturation after contrast (axial, sagittal). Vaginal and rectal contrast gel. Detailed lesion mapping.

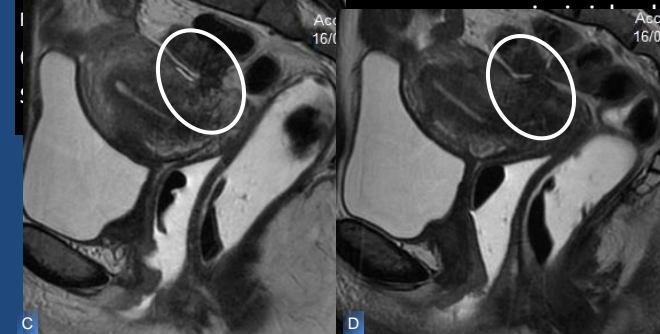
Results

•Considering HDNMR direct vision of lesions and indirect imaging signs such as ovarian medialization, uterine retroversion, bowel segmental angulations, elevation of the vaginal fornix or loculated liquid images, preoperative diagnosis of DIE was suggested in all 37 cases. At laparoscopy, 20 patients presented large bowel infiltration, 7 had bladder implants, 1 an inguinal lesion, 1 a rectovaginal septum lesion, 1 a retroperitoneal focus compromising the inferior ureter. Sixty percent of the patients had pelvic adhesions.

Large bowel compromise

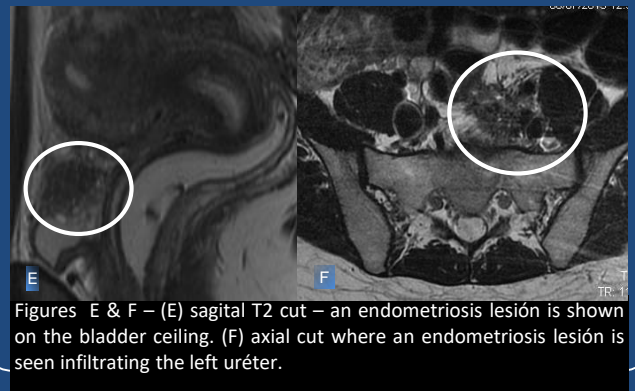


Figures A & B– Colon stenosis (A): rectal infiltration with diminished diameter (B) : macroscopic image of the stenosis



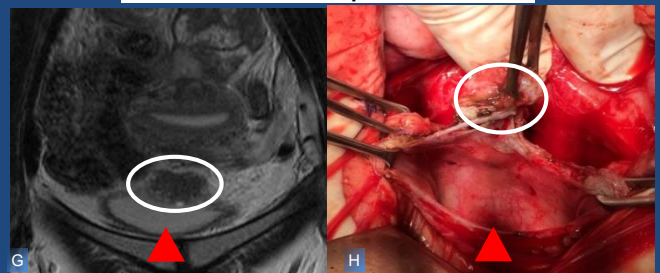
Figures C & D – Images obtained in a T2 sagittal view . An endometriosis lesion is seen behind the uterine cervix, that obliterates the Douglas Pouch, and infiltrates and retracts the large bowel.

Urinary track compromise



Figures E & F – (E) sagittal T2 cut – an endometriosis lesión is shown on the bladder ceiling. (F) axial cut where an endometriosis lesión is seen infiltrating the left ureter.

Bladder compromise



Figuras G y H – (G) corte coronal en T2 presenta foco endometriósico a nivel del techo de la vejiga.(H) Intraoperatorio resecando la lesión que infiltraba el techo vesical

Conclusión

- Contrast HDNM proved in our experience to be a trustable imaging clinical resource for preoperative
- diagnostic of DIE that helps surgeons to adequately plan and prepare patients for laparoscopy since findings
- correctly correlate.