

MRI staging of endometrial carcinoma according to new FIGO staging system (2009).

A. Khashper¹, H. Addley¹, N. H. AbouRokbah¹, E. Sala², and C. Reinhold¹

¹McGill University Health Center, Montreal, Quebec, Canada, ²Addenbrooke's Hospital, Cambridge, United Kingdom

Purpose: 1) To outline the *new* International Federation of Gynecology and Obstetrics (FIGO) staging of endometrial cancer with emphasis on changes from the prior staging system. 2) To demonstrate typical findings for each stage using multisequential MRI with an optimized imaging protocol. 3) To highlight diagnostic pearls and provide diagnostic tools to avoid possible pitfalls.

Content organization: Significant progress has made in the past two decades with respect to new imaging techniques and therapeutic options, resulting in improved treatment of endometrial carcinoma (EC). The International Federation of Gynecology and Obstetrics (FIGO) staging system for EC has been revised in 2009 (Table 1), reflecting significant prognostic factors recently proven in medical research and practice. The main goal of the staging system is to determine the extent of the disease, where MRI may assist in the preoperative assessment and surgical planning.

Table 1. FIGO staging Carcinoma of the Endometrium (2009)

IA	Tumor confined to the uterus, no or $< \frac{1}{2}$ myometrial invasion
IB	Tumor confined to the uterus, $> \frac{1}{2}$ myometrial invasion
II	Cervical stromal invasion, but not beyond uterus
IIIA	Tumor invades serosa or adnexa
IIIB	Vaginal and/or parametrial involvement
IIIC1	Pelvic node involvement
IIIC2	Para-aortic involvement
IVA	Tumor invasion bladder and/or bowel mucosa
IVB	Distant metastases including abdominal metastases and/or inguinal lymph nodes

The main changes in the new staging system involve reduction in the substages within stage I, and the separation of pelvic and para-aortic nodal involvement in stage III C. Extension of the carcinoma to the endocervical canal is not longer a criteria to diagnose stage II disease.

Summary: Endometrial carcinoma remains the most common neoplasia of the female reproductive tract. MRI provides important diagnostic information and aids in the correct staging of the disease. The main teaching point of the exhibit is to illustrate stage-based MRI findings using a dedicated imaging protocol that in the proper clinical context ensures triage into the appropriate management pathway.