## **Endometrial malignancy Synoptic Reporting MRI - NCG**

#### **PROTOCOL:**

### Patient Instructions:

- 4 hours fasting, but water intake is encouraged prior to the scan.
- Patient is asked to void 30 minutes prior to the scan.
- Serum Creatinine to be in check, ideally <1.2 mg/dl, above which, the eGFR is calculated. Contrast enhanced scan can be performed for eGFR >30mL/min.
- Antiperistaltic medication (e.g. IM buscopan) is not essential.

**Preparation**: For optimal reporting, instillation of per-vaginum sterile jelly is necessary.

### Sequences:

- Dedicated oblique axial Small field of view (FOV) high resolution T2W sequence.
- Dedicated oblique sagittal Small field of view (FOV) high resolution T2W sequence.
- Coronal T2W sequence, optional for small versus large FOV, but small FOV is preferred.
- Large FOV T2W image in axial plane from kidney to perineum.
- Fat saturated sequence for lower abdomen and pelvis.
- Axial T1W sequence for screening upper abdomen.
- Diffusion Weighted imaging, with b=800 to 1200, optional FOV, but preferably small FOV
- Dynamic post contrast scan is recommended, particularly for disease confined to the uterine body. Pre-contrast followed by 4 to 5 runs of post contrast imaging. (May be avoided in obviously large infiltrating diseases of advanced stage)
- Multiplanar post contrast fat sat sequence.

### Specifications:

For small FOV,  $512 \times 256$  matrix, 24 cm FOV, 4 mm slice thickness, 1 mm interslice gap T1W large FOV,  $256 \times 256$  matrix, 32 cm FOV, 4 mm slice thickness, 1 mm interslice gap

### Report:

### **Tumour description:**

- Endometrial thickness:
- Junctional zone :
- Endometrial cavity: Collapsed / Distended; homogenous / heterogenous signal intensity
- If homogenous, whether fluid / hematometra
- If heterogenous, T2 signal intensity, restricted diffusion and dynamic post contrast enhancement characteristics
- Location in small lesions : Anterior / posterior / either lateral wall
- Dimension in all three axes
- Extent of myometrial involvement: Less than half (comment on integrity of endometrial halo) / more than half of myometrial thickness / extraserosal involement
- Specific comment if extension to cornua
- Endocervix : Not involved / Involved
- Cervical stroma: Not involved / Involved

### **Locoregional extent:**

- Vaginal involvement : Anterior / posterior
- Parametrium: Free / Stranding / Involved, seen as nodular enhancing soft tissue
  If parametrium involved, its lateral extent, with distance from the lateral pelvic wall and medial wall of the obturator vessels.
- Hydroureter: Absent / Present, without / with hydronephrosis

# **Extrauterine pelvic extent:**

- Bowel wall : Uninvolved / Involved.
- Bladder wall: Uninvolved / Involved.

# Adenopathy:

- Size: Short axis diameter
- Morphology: Round / oval; homogenous / heterogenous signal intensity, diffusion characteristics
- Enhancement : Heterogenous / homogenous
- Locoregional nodal sites: Perivisceral, Internal iliac, External iliac, Common iliac sites
- Extended regional nodes : Para-aortic nodes
- Metastatic nodal sites: Inguinal nodes and other distant sites.

**Ovaries :** Normal / Suspicious

**Ascites:** Present / Absent

#### Metastases:

- Bone metastases
- Visceral metastases

Any other incidental benign appearing or indeterminate lesions seen.