Cervix 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 screening is recommended in cases of uncertain diagnosis or equivocal parametrial extension. 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, 512×256 matrix, 24 cm FOV, 4 mm slice thickness, 1 mm interslice gap T1W large FOV, 256×256 matrix, 32 cm FOV, 4 mm slice thickness, 1 mm interslice gap

Report:

Tumour description:

Morphology descriptors:

- Exophytic vs Endophytic
- Location : Anterior / posterior / circumferential
- Dimension in all three axes
- Percentage involvement of stroma ie >50% or <50%
- Signal intensity description : T2W, restricted diffusion, dynamic post contrast enhancement characteristics
- Circumferential cervical hypointense stromal ring: Whether intact or involved, focally or circumferentially

Locoregional extent:

- Uterine body involved or not If yes, its extent of involvement in cm .
- Vaginal forniceal space : Maintained / Effaced / involved.
- Vagina: Anterior / posterior; Upper two-thirds / upto inferior aspect
 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 / pseudoinvolved (bullous edema) / 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 and Common iliac sites
- Metastatic nodal sites: Para-aortic and 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.