

London Cancer
**Clinical Radiotherapy
Guidelines for Carcinoma
of the Endometrium**

March 2014

Indications

- Patients whose disease is assessed as sufficiently high risk to warrant adjuvant EBRT:
 - FIGO Stage IA Grade 3 with lymphovascular invasion
 - FIGO Stage IB Grade 2 with lymphovascular space invasion
 - Grade 3 FIGO Stage IB
 - Stage II
 - Stage III /IV disease
 - Serous or clear cell subtype
- Vault brachytherapy may be considered as a sole modality in patients with FIGO IB Grade 1 or 2, Stage II disease with no lymphovascular invasion, no deep stromal infiltration and non clear cell or serous histology.
- Patients not suitable for surgery but fit for radical radiotherapy and brachytherapy.

Essential PRE-TREATMENT CHECKS/investigations

- Pathology, radiology and management plan for all patients should be discussed on an individual basis in the Gynaecology MDT.
- The pathology report should include histological type, grade, depth of myometrial invasion, clearance to serosa and presence of lymphovascular invasion.
- Contrast-enhanced CT scans of the Chest for all high risk patients undergoing adjuvant treatment (to include abdomen if not already imaged).
- Baseline serum Full Blood Count, Urea & Electrolytes and Liver Function Tests.

Information for patients

- Information leaflets to be given on Pelvic External Beam Radiotherapy and brachytherapy, including expected site specific side effects in the Gynaecology Clinic.
- Advice on aftercare including vaginal dilators to be given during or after treatment
- CNS review before and after treatment

Consent

- Required for all patients according to local guidelines

Position / Immobilisation

According to local guidelines and may include

- Supine with knee supports
- Midline and lateral bony pelvis permanent markers.
- Bladder comfortably full

Planning technique

- 3D CT planning
- MR Planning where appropriate

Imaging required for GTV definition

- Contrast enhanced planning CT Abdomen and Pelvis
- L2 to below the introitus unless individually defined on booking form.

Dose / Time / Fractionation/ Category (for unscheduled gaps)/number of phases

- Radical treatment, RCR Category 2.
- 45 Gy to 50.4 Gy in 25 to 28 daily fractions.

CTV

- CTV Pelvic Nodes:
 - Obturator, internal and external iliac and distal common iliac nodes up to midpoint between aortic bifurcation and common iliac bifurcation unless iliac node involvement when extension of field to aortic bifurcation is recommended. The blood vessels should be used as a surrogate (i.e. 7mm around blood vessels edited for anatomical boundaries).
- CTV Parametrium
 - Includes the parametrium and upper third of vagina (unless there is involvement by disease, in which case a 2 cm margin below apparent disease should be used)

PTV

- PTV Nodes = CTV Nodes + 7-8mm
- PTV Parametrium = CTV Parametrium + 7 - 10mm
- PTV margin may be increased in obese patients to allow for greater set up uncertainty

Field arrangement

- For standard conformal plans a 3 or 4 field technique is used to cover the target volume
- IMRT/Rapid ARC - according to department protocol

Use of MLC

- As required to spare normal tissue

Critical organs and tolerance doses

- Organs at risk include the rectum and bladder
- Rectal dose for the entire course should be limited to <70Gy
- Bladder dose for the entire course should be limited to <60 Gy

PORTAL Imaging

- First 3 fractions and weekly thereafter

microselectron (HDR vault brachytherapy)

- Full insertion of intravaginal applicator.
- Patients have 8-12 Gy in 2 fractions to 0.5cm from the surface of the applicator.
- For patients who are having radiotherapy as sole treatment specialist input regarding dose and method of brachytherapy delivery advised.

On treatment review clinics

- Patients seen on treatment review clinic according to local guidelines
- Patient to see CNS after treatment

Follow up after radiotherapy

- Initial review 4-6 weeks after radiotherapy course completion or sooner if needed
- Patients to be followed up in joint Gynae-Oncology clinic, with alternating appointments between surgical and non-surgical oncological teams) every 3 months for 2 years.
- 6 monthly for a further 3 years
- Patients may then be discharged to their local unit at 2 years if appropriate with 6-monthly follow-up until 5 years

Arrangements for treatment summary

- Treatment summary to be completed with 14 days of finishing radiotherapy