ESTRO TEACHING COURSE ON IMAGE-GUIDED RADIOTHERAPY AND CHEMOTHERAPY IN GYNAECOLOGICAL

CANCER - FOCUS ON ADAPTIVE BRACHYTHERAPY

BUDAPEST, HUNGARY, 09-13 OCTOBER 2012

Course Directors:

Christine Haie-Meder, Radiation Oncologist, Institut Gustave Roussy, Villejuif (FR) - CHM

Richard Pötter, Radiation Oncologist, medical University Hospital, Vienna (AT) - RP

Teaching Staff:

Daniel Berger, Physicist, Medical University Hospital, Vienna (AT) - DB

Johannes Dimopoulos, Radiation Oncologist, Metropolitan Hospital, Athens (GR) - JD

Umesh Mahantshetty, Radiation Oncologist, Tata Memorial Hospital, Mumbai (IN) - UM

Taran Paulsen-Hellebust, Physicist, DNR Norwegian Radium Hospital, Oslo (NO) - TPH

Primoz Petric, Radiation Oncologist, Institute of Oncology, Ljubljana (SI) - PrPe

Peter Petrow, Radiologist, Institut Curie, Paris (FR) - PePe

Kari Tanderup, Physicist, University Hospital, Arhus (DK) - KT

Local Organisers:

Csaba Polgar, Radiation Oncologist, National Institute of Oncology, Budapest (HU)- CP

Tibor Major , Physicist, National Institute of Oncology, Budapest (HU)

ESTRO coordinator: Marta Jayes (BE)

Programme

Tuesday, 09 October 2012:

9.00 – Introduction (15 min)

Chairpersons: UM / CHM

- 9:15 Anatomical considerations, role of clinical gynaecological examination, and staging (30 min) AD
- 9:45 3D Image based normal anatomy: uterus, parametria, organs at risk, nodes US, CT, MRI (45 min)- PePe

10:30 - Coffee Break

11:00 - Pathology of gynaecologic tumors:

At time of diagnosis (20 min) - PePe

At time of brachytherapy (20 min) - PrPe

- 11:40 Assessment of nodal pathology (20min)- PePe/ PrPe
- 12:00 Imaging protocols MRI and CT: Patient preparation for EBRT and BT planning (20 min)- JD/PePe
- 12:20 CTV/ITV for external irradiation (40 min) UM / TPH

13:00 - Lunch

Chairpersons: DB /PePe

14:00 - Image guidance and PTV (30 min) - KT

- 14:30 Treatment planning EBRT physics aspects (30 min) TPH
- 15:00 Treatment planning EBRT medical aspects (dose constraints, DVHs) (30 min) UM
- 15:30 Coffee break
- 16:00 EBRT workshop (90 min)
- 16:00 Physics parallel session on target and organs at risk (one doctor in the room) (90 min)

Wednesday, 10 October 2012:

Chairpersons: JD/UM

09:00 - Case discussion: 6 different groups discussing together and coming with a solution. At the end, result comparison - 1 case cervix limited IB1 + pelvic node : CHM / 1 case intermediate risk endometrial (IB, Grade 2, 65 year-old): PrPe (45min)

9:45 - Results of trials in cervix cancer (40) - UM

10:25- Coffee break

- 10:50 EBRT contouring workshop results/discussion (40 min) UM /PrPe
- 11:30 Endometrium cancer: EBRT techniques and clinical evidence for postoperative radiotherapy. Results of trials in low/intermediate-risk (30) (CHM)
- 12:00 Case discussion based on trial results (30) (CHM,PrPe)

12:30 - Lunch

Chairpersons: RP/PrPe

- 13:30 Role of chemo/chemo-radiation (high-risk) endometrium (20 min) UM
- 13:50 Treatment strategies for vaginal and vulvar cancer (40 min) CHM
- **14:30** Cervix: Fletcher/Manchester, Tandem/Ring, Moulage technique and limitations in standard loading patterns (30 min) PrPe
- 15:00 Interstitial techniques for cervix cancer (30 min) JD

15:30 - Coffee break

- 16:00 GTV, CTVs at diagnosis and at time of brachytherapy cervix (50 min) CHM
- 16:50 Clinical cartoons (15 min) UM
- 17:05 Results of homework delineation examples / Educase analysis (30 min) JD/PrPe/UM

Thursday, 11 October 2012:

Chairpersons: TPH

- 09:00 Delineation of organs at risk (40 min) PrPe
- 09:40 Applicator reconstruction using Sectional Imaging (40 min) TPH

10:20 - Coffee break

- 10:50 GEC-ESTRO recommendations on dose volume reporting (40 min) RP
- 11:30 Discussion (45 min)

12:15 - Lunch

Chairpersons: KT / PrPe

13:15 - Endometrium: BT techniques (30 min) - RP

13:45 - Vagina: BT techniques (40 min) - JD

14:25 - Vulva: BT techniques (30 min) - UM

14:55 - Coffee break

15:25 –17:00 - MDs: Contouring workshop: cervix large-good response MRI/CT (Vienna case 1) / Physicists +

RTTs: reconstruction workshop in two groups (Varian, Nucletron)

Friday, 12 October 2012:

Chairpersons: PrPe / TPH

09:00 - Basic physics and dose planning principles (20 min) - TPH

09:20 - Radiobiological models to combine dose from external beam and brachytherapy (HDR, MDR, PDR, LDR) (25 min) - DB

09:45 - Medical aspects of treatment planning and dose constraints (35 min) - RP

10:20 - Coffee break

Chairpersons: DB / CHM

10:40 - Physics aspects of treatment planning intracavitary (endometrium) (20 min) - TPH

11:00 - Physics aspects of treatment planning for intracavitary +/- interstitial techniques in cervix cancer and PTV concept (50 min) - KT

11:50 - Physics aspects of treatment planning interstitial techniques (other than cervix) (30 min) - DB

12:20 - Lunch

Chairperson: RP

13:20 - Inter- and intra-fraction uncertainties and imaging strategies (MRI/CT) in brachytherapy (40 min) - KT

14:00 - Nodal boost: techniques, contribution of brachytherapy (20 min) - JD/KT

14:20 - Parametrial boost: comparison between brachytherapy and external irradiation (20 min) - KT

14:40 - Results and discussion from target contouring workshop (60 min) – UM/PrPe

15:40 - Coffee break

16:00 – 17:30 - MDs: Contouring workshop: cervix large-bad response CT/MRI (Vienna case 2) / Physicists + RTTs: treatment planning workshop in two groups (Varian, Nucletron)

Saturday, 13 October 2012:

Chairperson: KT / UM

09:00 - Practical exercise for dose reporting (30 min) - DB

09:30 - Results and discussion from target contouring workshop (60 min) - PrPe/JD

10:30 - Coffee break

11:00 – 12:00 – Interactive examples: treatment planning workshops (group splits in 3 rooms with two teachers) (60 min)

12:00 - Lunch

Chairperson: JD

- 13:00 Disease Control (30 min) CHM
- 13:30 Morbidity: Rectum, Sigmoid, Bladder, Vagina (30 min) JD
- 14:00 Interactive Feedback session: "What have you learnt from this course?" (60 min) KT/TPH/UM/JD
- 15:00 EMBRACE and GYN network (20 min) KT
- 15:20 Final Remarks and Closure of the Course (10 min) -UM