

DAY 1 OCTOBER 16th, 2019 (Wednesday afternoon)

Session 1: INTRODUCTION ON SEVERE BONE AND JOINT LOSS

13.30	Course admission
14.30	General approach to wide bone and joint loss
Lecture 1a	Introduction: overview of different causes of bone and joint defects Specific and common aspects in tumor, aseptic loosening, trauma and infection. D.M. DONATI
Lecture 1b	Relation between type of reconstruction and quality of life according to the patient functional needs. D.M. DONATI
14.50	Tumor related defects
Lecture 2	Principles of bone and joint resection in limb salvage surgery: the concept of grading, staging, anatomic compartment and margins. The amount of bone and soft tissue to be resected/excised in relation to different diagnosis and sites (bone and soft tissue tumor). C. MORRIS
15.10	Prosthetic loosening related defects
Lecture 3	Aseptic loosening in hip and knee prosthetic failure: with particular emphasis in discussing bone loss in the metaphysis, epiphysis and diaphysis. Physiological and excessive bone resorption pathology (pseudo tumor lesions). E.L. STAALS
15.30	Infection related defects
Lecture 4	Infection after prosthetic replacement (diagnosis, one and two stage treatment). A. ZAHAR
15.50	Discussion
16.10	Coffee break

Session 2: OVERVIEW ON RECONSTRUCTION METHODS

16.30	The use of massive bone allograft
Lecture 5	Principle of bone banking, different available grafts, biology of allograft integration. D.M. DONATI
16.50	The use of massive bone allograft in children
Lecture 6	Generalities on children with emphasis on the use of allograft as biological augmentation, for composite prosthesis or provider for future bone sparing solutions M. MANFRINI
17.10	The use of modular mega prostheses
Lecture 7	Different solutions in different megaprosthetic systems. The principle of modularity, feature related to cemented or un-cemented stems, type of articular replacement joint, different prosthetic surface treatment. M. DE PAOLIS
17.40	The use of new reconstructive materials
Lecture 8	The definition of scaffold. The use of porous resorbable structures and porous metal (tantalum, titanium). D.M. DONATI
Lecture 9	3D printing custom made prostheses. Principle of custom made implants, projecting custom reconstruction. D.M. DONATI
18.10	Discussion
18.30	End of the day

DAY 2 OCTOBER 17th, 2019 (Thursday morning and afternoon)

Session 3: MANAGEMENT OF SEVERE BONE LOSS AROUND THE HIP

08.00	Tumor related acetabular defects.
Lecture 10	Pelvic resections: surgical approach, resection classification, different type of reconstruction in different pelvic sites. Treatment of metastatic defects. D.M. DONATI
Lecture 11	Navigation surgery, robotics and new technologies. T. FRISONI
09.00	Pelvic custom reconstruction in tumor surgery. Relive surgery
09.30	Reconstruction of the proximal femur in tumor surgery.
Lecture 12	Modular systems (including metastasis related prosthesis) with particular emphasis on different type of stems in proximal femur reconstruction. Allograft prosthetic composite and the problem of soft tissue attachment. Extrarticular proximal femur resections. Treatment of metastatic defects. G. BIANCHI
10.00	Proximal femur in two stage infection surgery. Relive surgery
10.30	Discussion
11.00	Coffee break
11.30	Multiple cup revision related acetabular defects.
Lecture 13	Classification and approach. Biomechanics of the pelvis. Achieving anatomical reconstruction. Pseudotumor. Use of cage with or without support (allografts, augments, buttresses). Use of tantalum, other modular system. D.M. DONATI
12.00	Pelvic custom reconstruction in multiple revision surgery. Relive surgery
12.30	Discussion
12.45	Lunch break

Session 4: TREATMENT OF WIDE BONE LOSS AROUND THE KNEE

13.30	Around the knee major reconstruction in tumor surgery.
Lecture 14	Defect of the distal femur due to tumor surgery (surgical approach in different ages, type of diagnosis and tumor site). Stem surgical revision, total femur prosthesis, reconstruction options after extrarticular resection of the knee. C. MORRIS
14.00	Distal femur resection and reconstruction with OSS. Relive surgery
Lecture 15	Proximal tibia defects, the problem of patellar tendon reconstruction, rotation flaps coverage. Allograft prosthetic composite. C. MORRIS
15.00	Discussion
15.20	Wide bone loss in multiple revision surgery around the knee
Lecture 16	Classification, surgical approach. Choice of the prosthesis related to the ligament efficiency. Type of substitution in bone loss due to trauma and Periprosthetic fracture. C. ZORZI
Lecture 17	The choice of the stem in different prosthetic configuration. Use of augments, cones, allografts and their integration with the surrounding bone. How to avoid loosening due to rotational stresses. C. ZORZI
Lecture 18	Treatment of knee prosthetic infection. Guidelines of diagnosis and cure (infectiology and surgery). A. ZAHAR

16.20	Discussion
16.30	Coffee break
16.50	Knee osteoarticular defect reconstruction due to tumor or other cause. Relive surgery
17.50	Discussion based on cases provided by attendees.
18.30	End of the day
20.00	Course dinner

DAY 3 OCTOBER 18th, 2019 (Friday morning)

Session 5: THE TREATMENT OF BONE LOSS IN THE UPPER LIMB

08.30	Tumor related defect in the scapula and proximal humerus.
Lecture 19	Proximal humerus resection and reconstruction including functional solutions such as osteoarticular reconstruction and reverse prosthesis G. BIANCHI
08.50	Discussion
09.00	Tumor related defect in elbow and wrist.
Lecture 20	Modular prosthesis and APC in the elbow. M. DE PAOLIS
Lecture 21	Different solution in the wrist reconstruction including osteochondral allograft and arthrodesis. The management of the soft tissue. M. DE PAOLIS
Lecture 22	Surgery in metastatic disease in the limb. L. CAMPANACCI
09.40	Discussion
10.00	Coffee break

Session 6: TREATMENT OF WIDE BONE LOSS IN THE CHILDREN

10.20	Treatment of intercalary defects.
Lecture 23	Bone allograft application with or without free vascularized fibula transplant as joint saving method. M. MANFRINI
10.40	Treatment of osteoarticular defects.
Lecture 24	APCs, partial APCs. L. CAMPANACCI
Lecture 25	Reconstructive modular system in the child. The problem of stem fixation in growing bones. Expandable prosthesis and elongation nail. M. MANFRINI
11.20	Discussion
11.40	Rotation plasty, proximal tibia reconstruction with children APC. Relive surgery
12.20	Discussion
12.30	End of the course