

AORecon Course—Principles of Total Hip and Knee Arthroplasty

LEARNING OBJECTIVES for Lectures

Day 1, Morning

Time	AGENDA ITEM	WHO
Module 1	PERIOPERATIVE MANAGEMENT OF TOTAL HIP AND KNEE ARTHROPLASTY	
09:10–09:20	Summary: Optimizing the patient journey Lecture (standard lecture available) <ul style="list-style-type: none"> • Patient preoperative education and physiotherapy • Pain • Patient discharge planning and home optimization • Patient expectations 	
Module 2	PERFORMING TOTAL HIP ARTHROPLASTY	Moderator
09:40–09:50	Preoperative planning to restore hip biomechanics in THA Case-based lecture <ul style="list-style-type: none"> • Describe how to position the acetabular component (version, inclination, and medialization) • Optimize the hip center • Restore femoral offset • Equalize leg lengths 	
09:50–10:00	Overview of surgical approaches for THA Lecture Describe the indications, advantages, and disadvantages of the following approaches: <ul style="list-style-type: none"> • Anterior • Anterolateral • Lateral • Posterior 	
10:30–10:45	Cemented fixation Lecture (standard lecture available) <ul style="list-style-type: none"> • Discuss advantages and disadvantages of cemented fixation • Describe operative technique for cemented fixation of stem and cup • Identify pitfalls when using cemented fixation 	

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10:45–10:55	Cementless fixation of the cup Lecture <ul style="list-style-type: none"> • Discuss advantages and disadvantages of cementless cup fixation • Describe operative technique for cementless cup fixation • Describe optimal positioning of cup and the influencing factors • Identify pitfalls when inserting a cementless cup 	
10:55–11:05	Cementless fixation of the stem Lecture <ul style="list-style-type: none"> • Discuss advantages and disadvantages of cementless stem fixation • Describe operative technique for cementless stem fixation • Describe optimal positioning of stem and the influencing factors • List pitfalls when inserting a cementless stem (eg, leg length discrepancy, instability, limping) 	
11:15–11:25	Preventing dislocation in THA Lecture <ul style="list-style-type: none"> • Conduct detailed and effective preoperative planning • Explain the importance of biomechanical reconstruction of the hip • Describe techniques for leg-length and offset restoration • Describe intraoperative checks (trailing) to ensure that it reflects preoperative plan 	
11:25–11:35	Bearing choice in THA Lecture <ul style="list-style-type: none"> • Describe types of bearings including: hard-on-hard bearings, hard-on-soft bearings, modularity, head size • Describe advantages and disadvantages of each types 	
11:45–11:55	Intraoperative challenges and complications Lecture <ul style="list-style-type: none"> • Prevention of nerve injury • Prevention of vascular injury • Dealing with intraoperative fractures • How to extend the exposure in case of complication 	

Day 1, Afternoon

Time	AGENDA ITEM	WHO
13:40–13:50	Infection Lecture <ul style="list-style-type: none"> • Recognize the possibility of infection and apply guidelines and a structured approach to diagnosis • Apply best practices and strategies in the OR to reduce the possibility of infection during surgery • Apply guidelines and a structured approach to the management of infection 	

13:50–14:00	Periprosthetic fractures Lecture <ul style="list-style-type: none"> • Apply the UCS or other classification system to periprosthetic fractures • Describe the indications and options for fracture fixation with implant retention • Describe the indications and options for partial and full revision arthroplasty • Describe the factors that may alter the treatment intraoperatively: extensive osteolysis, comminution, etc 	
14:00–14:10	Key steps in planning THA Lecture (standard lecture available) <ul style="list-style-type: none"> • Describe the key steps of planning a THA • Explain the templating process and its relevance with regards to these key steps • Recognize the benefit of a checklist provided in the Skills Lab booklet 	

Day 2, Morning

Time	AGENDA ITEM	WHO
Module 3	PERFORMING TOTAL KNEE ARTHROPLASTY	Moderator
08:30–08:40	Surgical approaches for TKA Lecture <ul style="list-style-type: none"> • Describe the indications, advantages, and disadvantages of each of the following approaches: <ul style="list-style-type: none"> ◦ medial parapatellar, subvastus, midvastus, lateral 	
08:40–08:50	Limb alignment and kinematics Lecture <ul style="list-style-type: none"> • Describe the essentials of limb alignment • Describe the anatomic cuts for a knee replacement • Describe rotation of the femoral component • Describe the nuances of femoral component rotation with different degrees of coronal malalignment 	
09:00–09:10	Bone cuts in TKA Lecture <ul style="list-style-type: none"> • Alignment guides in the tibia and femur • Navigation (no details on surgical technique) • Patient-specific instruments (no details on surgical technique) Gap balancing vs measured resection	
09:10–09:20	Balancing the varus knee and fixed flexion contracture Case-based lecture <ul style="list-style-type: none"> • List common causes for FFC and varus deformity • Classify the deformities • Discuss techniques in order of application (removal of osteophytes, ligament releases) 	

Time	AGENDA ITEM	WHO
09:20–09:30	Balancing the valgus knee Case-based lecture <ul style="list-style-type: none"> List common causes and affected ligaments in valgus knees Discuss techniques in order of application (removal of osteophytes, ligament releases) 	
09:30–09:40	The role of the PCL in TKA Lecture <ul style="list-style-type: none"> Discuss the advantages and disadvantages of preserving the PCL in TKA 	
10:10–10:20	TKA after previous high tibial osteotomy (HTO) Case-based lecture <ul style="list-style-type: none"> Define extraarticular vs intraarticular deformity Describe the importance of long-leg x-rays Describe the surgical technique and outcomes 	
10:20–10:30	TKA after previous trauma Case-based lecture <ul style="list-style-type: none"> Discuss the challenges of previous fracture and associated deformities from the trauma Describe the complications in TKA following previous trauma 	
10:30–10:40	TKA after previous unicompartmental arthroplasty Case-based lecture <ul style="list-style-type: none"> Preoperative evaluation and planning Discuss the techniques of implant removal Describe how to manage bone deficiency 	
10:50–11:00	Patellofemoral resurfacing and tracking <ul style="list-style-type: none"> Discuss the advantages and disadvantages of resurfacing Describe the patellofemoral biomechanics Describe the importance of femoral and tibial component positioning 	
11:00–11:10	Diagnosis and treatment of infection in TKA <ul style="list-style-type: none"> Describe the diagnostic tests Describe the diagnostic criteria and red flags Describe the treatment algorithm (acute, chronic) 	
11:20–11:30	Key steps in planning TKA Lecture (standard lecture available) <ul style="list-style-type: none"> Describe the key steps of planning a THA Explain the templating process and its relevance with regards to these key steps Recognize the benefit of a checklist provided in the Skills Lab booklet 	