

Scientific Program

1) **ANATOMY**

Bone anatomy, muscles, Marshall layers, ligaments, meniscus, arthroscopy anatomy;

2) **IMAGING** (Guest Speaker Dr. Guilherme Reis MD)

RX, TC, Bone Scan, **MRI**. Indications, description

3) **PHYSICAL EXAM Normal and Abnormal**

Gait, inspection, palpation, extensor mechanism/tendons, etc.

4) **BIOMECHANICS Concepts and practical application**

Anatomic and mechanic axis, adductor moment, knee movements, patello femoral biomechanics, 4 bar theory e meniscal behavior;

5) **FRACTURES Supra condilar and Patella**

Mechanism, classification, Physical exam, evaluation and treatment;

6) **FRACTURAS Tibial plateau, TTA, tibial spines**

Mechanism, classification, Physical exam, evaluation and treatment;

7) **EXTENSOR MECHANISM Patellar and quadriceps tendon ruptures**

Mechanism, Physical exam, evaluation and treatment;

8) **MENISCUS I**

Anatomy, lesions: etiology, classification, physical exam, diagnosis conservative treatment

Discoïd Meniscus

9) **MENISCO II**

Meniscectomy, suture, meniscus transplant;

10) **ACL**

Anatomy, mechanism, physical exam, diagnosis, associated lesions, acute phase approach, conservative treatment;

11) **ACL Reconstruction**

Surgical techniques (single and double bundle), grafts tunnel positioning, fixation, post-op, complications;

12) **ACL Revision and open physis reconstruction**

Special care, surgical techniques;

13) **PCL**

Anatomy, mechanism, physical exam, diagnosis, associated lesions, acute phase approach, conservative treatment;

14) **PCL Reconstruction**

Surgical techniques (single and double bundle), grafts tunnel positioning, fixation, post-op, complications;

15) MCL and POSTERO MEDIAL LESIONS

Anatomy, mechanism, physical exam, diagnosis, associated lesions, treatment in acute and chronic cases;

16) LCL and POSTERO LATERAL LESIONS

Anatomy, mechanism, physical exam, diagnosis, associated lesions, treatment in acute and chronic cases;

17) KNEE DISLOCATION

Mechanism, physical exam, diagnosis, treatment in acute phase, final treatment, complications;

18) CARTILAGE LESIONS

Etiology, classification, physical exam, evaluation, conservative treatment, surgical treatment (abrasion, drilling, mosaicoplasty, condrocyte transplant)

19) OSTEOCONDRIITIS

Etiology physical exam, diagnosis and treatment

20) PATELLO FEMORAL JOINT Pain Syndrome / Osteoarthritis

Etiology, physical exam, diagnosis, conservative treatment, surgical treatment;

21) PATELLO FEMORAL JOINT Instability (Acute dislocation & Recidivant dislocations)

Etiology, types, classification, troclear dysplasia, patellar shape, physical exam, Imaging evaluation (TTTG etc.). Conservative treatment.

22) PATELLO FEMORAL JOINT Instability (Acute dislocation & Recidivant dislocations)

Surgical treatment (proximal and distal realignment proximal, MPFL);

23) KNEE OSTEOARTHRITIS

Etiology, Physiopathology, conservative treatment / Treatment in the young adult : Behavioral changes, orthotics, physiotherapy, drugs (analgesics, AINE, "chondroprotectors")

24) OSTEONECROSIS

Etiology, age, physical exam, diagnosis, treatment;

25) DOUBLE AND TRIPLE VARUS KNEE

Definition, physical exam, conservative and surgical treatment;

26) VALGUS AND VARUS OSTEOTOMIES

Indications, demands, techniques, hardware, grafts;

27) UNICOMPARTIMENTAL KNEE REPLACEMENTS

Indications, limits, surgical approaches, techniques, complications, revisions;

28) TOTAL KNEE REPLACEMENT: Principles

History, types (semi-constrained, hinge), component technologic evolution (CR, PS, all-poly, high link polyethylene, rotating platform, cementless), common principles;

29) TOTAL KNEE REPLACEMENT Techniques, post-op, complications

Surgical approaches, instrumentation, cuts, positioning, ligament balance, bone cement, per-op difficulties and approaches (varus, valgus, flexum, recurvatum, bone defects);

30) TOTAL KNEE REPLACEMENT REVISION septic and aseptic

Etiology, physical exam, diagnosis, treatment;

31) KNEE ARTRODESIS

Indications, limitations, surgical techniques, fixation devices, complications;

32) EXTENSOR MECHANISM Tendinitis, bursitis, Osgood-Schlatter, Sinding-Larsen-Johansson, plica –

Etiology, physical exam, evaluation and treatment;

30) SEPTIC ARTHRITIS

Physical exam, etiology, diagnosis and treatment;

33) ARTHROFIBROSIS

Etiology and treatment;

34) REUMATIC DISEASES/ SYNOVITES

Hemophilic arthritis, gut, villonodular synovitis, rheumatic synovitis, chondrocalcinosis, chondromatosis;

35) KNEE TUMORS

Benigns and Maligns;

Physical exam, Diagnosis, classification and treatment.