

ORTHOPAEDIC CURRICULUM

Faculty of Medicine, Peradeniya Campus

The Orthopaedic Department in the Teaching Hospital, Kandy will accommodate medical students for a very brief course Orthopaedic Surgery for 12 days. 8-12n

The general objectives of this course are:

1. To have knowledge about the important and common problems in Orthopaedics,
2. To give the general principles of patient's symptomatology, differential diagnosis and treatment of Orthopaedic disease. Students are also given an account on the specific orthopaedic terminology.
3. To emphasize on basic aspects in trauma and management of these.
4. To acquire the skills of taking good history of both trauma and elective cases, and how to perform examination of joints.
5. (To develop the students' ability for self learning and problem solving as well as presenting himself properly.)

The specific goals, however, are:

1. Giving them the important knowledge of common disorders,
2. Develop self learning through problem solving sessions.
3. Developing the skills of examination of major joints through clinical teaching and attending clinics with the tutors.
4. Give the students the ability to read an x-ray and extract information out of it.
5. Developing the use of multimedia in the process of teaching and making an electronic library which will include all lectures given as well as x-rays and illustrations.
6. Developing the skills of the tutors in teaching and assessing students.

Ways of teaching

The set goals are achieved through the following ways:

1. Giving basic information through LECTURES. The time of the lecture is set to 60 minutes. There will be a series of 10 Presentations :

2. During the Clinical appointment

Providing History taking skills and Examinations skills of bones and joints
Encouraging students to discuss and present themselves through TUTORIAL, in which skills of examination and differential diagnosis are discussed. The time of tutorials is 1 hours.

Developing self learning and logical thinking through PROBLEM SOLVING sessions. These are also set at 1 hour.

Patient presenting with Open fracture
Patient admitted for Routine Total Knee Replacement
Design a national programme for prevention RTA
Post op management of a patient with ORIF femur

The topics are chosen by the teaching staff in the department before the beginning of the year and the course organizer has the freedom of 3 topics from these, for each batch of students. The students are divided into 3 groups, each is given a problem. A tutor is assigned to each group, and other students are encouraged to participate in the discussion.

3. Hands-on skills are achieved through attending clinical bedside teaching by Senior MO / Nurses about application of POP, Log Rolling, application of traction, running of a post-trauma clinic.

4. General management of Common Orthopaedic trauma by bedside teaching

Schedule:

a. Lectures

1. Introduction to Orthopaedic surgery and the History of OS
2. Musculoskeletal Injuries, initial management
3. Musculoskeletal injuries, Definitive management
4. Complications of Fractures and treatment of fractures
5. Spinal cord injury
6. Bone and joint infections
7. Common bone malignancy and management
8. Management of back pain – an easy approach
9. Hospital infection Prevention and consequences
10. Slideshow of commonest orthopedic conditions

2. Clinical Appointment:

Period of 2 weeks (12 working days)

8 am to 12 noon

Venue: Orthopaedic Clinic, Ward 3 and Ward 24

1. Monday: Class Taken By MO / Reg / SR – Orthopaedic Clinic

Introduction to Orthopaedic terminology: What sorts of patients come to seek Ortho care? Deformity, Valgus, varus, scoliosis, khyphosis, pes planus etc. Meaning of Ortho procedure terminology. (Osteotomy, Arthrotomy. Arthroplasty, THA etc), Implants, arthroscopy, Asepsis and the risks of wound infection in OS

History taking in a orthopedic patient, Casualty ?, Routine ?, Different type of clinics, Usual followup of a fracture, Physiotherapy,

Collection of patient shown with X Rays, introducing students to the array of Casts / Implants plaster cutting, demonstration of plaster disease etc.

Rules of the unit

2 Tuesday : Orthopaedic Clinic - VOS

common symptoms

Basics of examination of a joint

Basic and special investigations.

Common everyday conditions:

Cx Spondylosis, Tennis elbow, Triggering Fingers , CTS, Back Pain, OA Knees, Ganglions,

3 Wednesday: Ward 3 – Ward 24 VOS: Grand ward Round:

Bedside teaching

Prevention of fractures, mechanisms of fractures, common fractures, their management, wounds, plasters and management, traction, int fixation devices, common Fractures of children, common fractures of the elderly.

Problem Solving: Session 1

Session One: patient sustains an Open Fracture:

Group divided to 4 sub groups. Each member takes on a different topic. (History, examination, description of wounds, management, expected complications, follow up, rehabilitation. Students must be prepared before they come by reading, Web browsing,

4. Thursday: Ward rounds: Taken by MO / SR / Reg

Some Cold orthopedic conditions.

Back pain, Perthes, Transient synovitis, Child abuse, Infections, OA, Insufficiency fractures of the old, OP, prevention diagnosis and treatment.

Problem Solving: Session 2

Second group: Preparing a patient for routine surgery –

Indications, decision making. Investigations, referral to others, optimizing the patient. day of admission, checklist, immediate pre-op prep, DVT prophylaxis, consent, Prevention of Infection.

5: Friday: Pediatric Clinic - VOS

Common pediatric Orthopaedic conditions
CTEV, DDH, Bowing, Knock knees, Torticollis,

6: Saturday: Ward round: VOS

Day to day problems of Orthopedist patient,
Examination of Knee, Spine, Shoulder (MO)

7. Monday: Clinic: MO / SR / Reg

General running of a fracture post op clinic, cases, how follow up decisions are made

Post op complications

Management of post op complications

Orthopaedic Emergencies: absent Pulse, Cauda Equina compression, Compartment syndrome, crush syndrome, pelvic fracture.

8. Tuesday: Clinic - VOS

Common adult Orthopaedic Conditions –

Questions and answers only

Students must come prepared

9. Wednesday - Ward Round – VOS

More o Common musculoskeletal condition – their management - bedside

Problem Solving: Session 3

3 rd group: Prevention of accidents

Organizing a evacuation service

Students must give written suggestions in an orderly manner from each group

10. Thursday – Ward / MO /Reg/ SR

More cold orthopedic conditions

How joints are aspirated and injected (keep patients ready)

General functioning of ward

How lists are prepared

How physiotherapy is organized

How plans are made.

How notes are made

11, Friday – Clinic - VOS

Common Pediatric Orthopaedic conditions –

Problem Solving: Session 4

Patient with ORIF Femur presents with fever and Discharge on 4th day

12 Saturday: Ward Round VOS

Questions only (later this will be replaced bt a MCQ)

Signing of record books

Ways of assessment (In Near future – at present we don't have the time for this)

The students are assessed by:

1. Taking their attendance with emphasis on attending clinicals and tutorials.
2. Unmanned OSCE which includes direct specific questions on an x-ray, a patient, a sign or a method of treatment. Both exams carry 40 marks.
3. (later)MCQ. This carries 20 marks.