ORTHOPAEDICS

1. **ORTHOPAEDICS 0RT 203**
2. **MODULE COMPETENCE.**

**This module is designed to enable the learner manage common orthopaedic conditions.**

**Module outcomes.**

**By the end of this module the learner should:**

**1.Demostrate understanding orthopaedic disorders.**

**2.Classify orthopaedic disorders.**

**3.Manage orthopaedic disorders.**

**Module units.**

**1.Introduction to orthopaedics.**

**2.Common orthopaedic conditions.**

**3.Principles of management of orthopaedic conditions.**

**Module content.**

**Introduction to orthopaedics; Historical background, general considerations in orthopaedic surgery. Classification of orthopaedic conditions; infections, degenerative, neurological disorders, neoplasms. Principles of management; conservative and surgical.**

**INTRODUCTION TO ORTHOPAECS**

**Orthopaedics is concerned with bones, joints, muscles, tendons and nerves>the skeletal system and all that makes it move. Conditions that affect these structures fall into seven easily remembered pairs:**

**1.Congenital and developmental abnormalities.**

**2.Infection and inflammation.**

**3.Arthritis and Rheumatoid disorders.**

**4.Tumours and lesions that mimic them.**

**5.Metabolic and endocrine disorders**

**6.Neurogical disorders and muscle weakness.**

**7.Injury and mechanical derangement.**

**Diagnosis in orthopaedics as in all medicine is the identification of disease.**

**It begins from the very first encounter with the patient and gradually modified and fine-tuned until we have a picture not only of pathological process and also of the functional loss and disability that goes with it.**

**Understanding evolves from the systematic gathering of information from the history, the physical examination, tissue and organ imaging and special investigations.**

**Systematic, but never mechanical behind the inquiring mind there should also be what D.H. LAWRENCE has called the intelligent heart.**

**It must never be forgotten that the patient has a unique personality, a job and hobbies, a family and a home, all have a bearing upon and are in turn affected by the disorder and its treatment.**

**NOTE:**

* **History**
* **Symptoms**
* **Past history**
* **Family history**
* **Social background**
* **Examination**
* **Investigations**
* **Diagnosis Gives a bearing to appropriate Treatment.**

**HISTORICAL BACKGROUND:**

* **The term orthopaedic is derived from the Greek words opoos(straight) and 3.1400s(child).**
* **It was originally applied to the art of correcting deformities by Nicholas Andrey, a French physician who 1741 published a book entitled orthopaedic: Or the Art of correcting and preventing deformities in children. By such means, as may easily be put in practice by parents themselves and all such as are employed in educating children.**
* **In Andrey’s time orthopaedic surgery in the form known today did not exist. Surgery was still primitive indeed except for sporadic attempts by ingenious individuals, it is probable that little real progress had been made since the days of Hippocrates who lived in about 400BC.**
* **The enthusiasm and capacity for study were there. The real obstacle to progress was lack of the essential facilities that we now take so much for granted>anaesthesia, asepsis, powerful microscopes and x-rays.**
* **Thus orthopaedic surgery, until relatively recent times was confined largely to the correction of deformities by rather crude pieces of apparatus, to reduction of fractures and dislocation by powerful traction and to amputation of limb.**

**LANDMARKS OF SURGERY IN NINETEENTH CENTURY:**

**-----Introduction of microscopes, rays.**

**-----Facility improvement.**

**-----Theatres.**

**-----Anaesthesia.**

**THE EMERGENCE OF ORTHOPAEDICS AS A DISTINCT SPECIALITY:**

**------Hugh Owen Thomas 1834-1991 of Liverpool.**

**>operative surgery**

**>manipulative surgery**

**>rest and splintage.**

**Nephew to Owen-Sir Robert Jones 1857-1933 developed sound foundation orthopaedic surgery.**

**THE PRESENT:**

* **Advances in Biomaterials, instrumentation and diagnostic techniques.**
* **Joint replacement in treatment of arthritis>knee, Hip.**
* **Microsurgical techniques, repair of blood vessels and nerves.**
* **Arthroscopy, Arthroscopic surgery.**
* **Reduction in patient stay in Hospital.**
* **A more rapid return to normal function.**
* **Treatment and prevention of infections.**

**THE FUTURE:**

* **Improved technology----Tele medicine.**
* **Molecular biology and cell genetics.**
* **Knowledge on DNA make up of genes.**
* **Designer drugs, bone morpho genic proteins[BMPS] now being used to stimulate bone healing in difficult critical situations.**
* **Imaging—scans, MRI.**

**The aim must be to consolidate the new knowledge gained and to develop an even more sound clinical judgement, so that in devising treatment for our patients. We do the right thing at the right time. Get it right first time should be the slogan. This is still a challenge, the challenge that adds to the fascination of orthopaedic surgery. [Interest, preoccupation, passion, obsession, compulsion]**