**OSTEOPOROSIS**

**BY Evans Nyakundi**

**LECTURER**

**KMTC KISII CAMPUS**

* **This is a clinical disorder characterized by an abnormally low bone mass.**
* **Defects in bone structure and condition renders the bone unusually fragile and prone to fractures. However, mineralization is left intact.**
* **Depletion is brought about by bone resorption and decreased bone formation.**
* **Bone loss strength is due to reduction in bone mass.**
* **Modest stress or strain causes a fracture.**
* **African people are less prone to these effects and have low incidences.**
* **Osteoporosis can also be due to disuse immobilization or inflammation. This one can be reversed once the local cause is addressed.**

**TYPES.**

**1.Postmenopausal Osteoporosis:**

**This is physiological bone depletion which accompanies ageing. Rapid bone loss due to increased osteoclastic resorption (high turnover osteoporosis). Dietary insufficiencies in the old, chronic ill- health and reduced mobility (low turnover osteoporosis). At menopause there is increased bone loss due to decreased estrogen levels.**

**RISK FACTORS FOR POST MENOPAUSAL OSTEOPOROSIS:**

* **Caucasoid(white) or Asiatic ethnicity.**
* **Family history of Osteoporosis.**
* **History of anorexia nervosa and Amenorrhea.**
* **Low peak bone mass in the third decade.**
* **Early onset of menopause.**
* **Oophorectomy.**
* **Early hysterectomy**
* **Nutritional insufficiency**
* **Chronic lack of exercise.**
* **Cigarette smoking**
* **Alcohol Abuse**

**CLINICAL FEATURES AND DIAGNOSIS.**

* **Back pain**
* **Thoracic kyphosis**
* **Height diminishing**
* **X-rays will show bone changes.**

**PREVENTION AND TREATMENT.**

* **Early identification**
* **Advise on adequate levels of dietary calcium and vitamin D**
* **High level of physical activity**
* **Avoid smoking, excessive alcohol consumption**
* **Calcium and vitamin D supplements.**
* **Hormone replacement therapy(HRT).**
* **Introduction of antiresorptive drugs**
* **Management of fractures.**

**OTHERS.**

**Involutional Osteoporosis.**

* **>75 years or advanced in age**
* **Fractures**
* **Dietary**
* **Sunlight (House confinement)**

**Post-climacteric osteoporosis in men.**

**Reduced androgenic hormones.**

**Secondary osteoporosis.**

**Due to, Hypercortisonism, Gonadal hormone deficiency, Hyperthyroidism, chronic alcoholism and immobilization.**