

OSCE TEAM

History Taking

Objective:

A- How to take history of orthopedic emergencies

1. Bone and joint infections
2. Compartment syndrome
3. Acute joint dislocation
4. Open fracture
5. Fracture with Neurovascular injury
6. Pelvic fracture
7. Cauda equina syndrome
8. Acute spinal stenosis


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References: Team 433 history, Doctors notes and slides.

[Important, Notes, Extra] [editing file](#)

• **Structure of History** (general structure):

Demographic features	<ul style="list-style-type: none"> ✓ Age (the extremes) ✓ Gender (F vs M) ✓ Obesity
Chief complaint (9 symptoms)	*(Deformity, Pain, Swelling, Stiffness, Instability, Altered sensation, Weakness, Loss of functions, Limping)
History of presenting illness	<ul style="list-style-type: none"> ✓ Analysis of each chief Complaint (Discussed later)  ✓ Mechanism of injury ✓ Constitutional symptoms (RED FLAGS) <ol style="list-style-type: none"> 1. Weight loss 2. Fever 3. Loss of sensation (Ex: Saddle anesthesia in Cauda equina) 4. Loss of motor function 5. Sudden difficulties with urination or defecation ✓ Associated symptoms (other system involved rather than MSK, EX: Neurovascular symptoms)
Functional level	✓ Ask about personal activities (playing soccer, gym..etc)
MSK systemic review	✓ 9 symptoms* same above
Past medical history	✓ Hx Cancer, DM, sickle cell disease, Rheumatological diseases (ex: SLE) , Infections (EX: TB -> Pott's disease), IBDs
Past surgical history	<ul style="list-style-type: none"> ✓ Hx Serious injuries and/or broken bones ! If yes, ask about how it was managed: <ul style="list-style-type: none"> Non-operative (Physiotherapy, Orthotics “splints and braces” , Walking aid) Operative (What, where, and when? Peri/post-operative complications?)
Drug Hx/Allergy/Immunization	<ul style="list-style-type: none"> ✓ Medication (as: steroid) ✓ Allergies to (Ex: NSAIDs or Antibiotics “Penicillin” ..etc) ✓ Immunization status (Ex: Tetanus vaccine)
Family Hx	✓ Family History (as: Sickle Cell Anemia)

Social Hx	<ul style="list-style-type: none">✓ Occupational Hx✓ physical activity (lack of it, is an important risk for osteoporosis)✓ Smoking✓ Alcohol
Systemic enquiry	<ul style="list-style-type: none">✓ Review of all the rest body system (Cardiopulmonary, GIT, Genitourinary ...etc)▪ PLEASE ASK ABOUT EVERY SINGLE SYMPTOM OF ANY SYSTEM IN YOUR DIFFRENTIAL TO RULE IT OUT “THE DR. SAID THAT IN MY CHECK LIST THERE ARE MARKS ON MENTIONING NEGATIVE SYMPTOMS”

● Special cases in Orthopedic History:

(specific questions for these areas)

Pediatric

- **Product of** → Full Term or premature
- **Pregnancy** → normal or not
- **Delivery** → SVD , C-section (elective vs. E.R)
- **Family** → parents relatives, patient sequence, F/H of same problem. EX: Laxity disease
- **Any** → NICU, jaundice, blood transfusion
- **Vaccination**
- **Milestones** → neck, flip, sit, stand, walk
- **Who/how noticed the problem?**
- **Pre-natal:** cephalic vs breech, oligohydramnios, primigravida, twins
- **Post-natal:** Swaddling, Strapping

Spine

- **Pain radiation** → as L4, exact dermatome/myotome
- Coughing, straining
- **Specific Red Flags** : Peri-anal Numbness, Sphincter control (urine & stool)
- **General Constitutional symptoms** : fevers, sweat, weight loss, loss of appetite, fatigue.
- **Apnea**
- **Loss of sensation or weakness**
- **Shopping trolleys** (forward flexion)
- **Hx of tumor or malignancy (Risk of Metastatic)**
- **Neuropathic Claudication:**
 - **Increase** → back extension & walking downhill
 - **Improves** → walking uphill & sitting (Flexion position of the back)
- **Vascular Claudication:**
 - **Increase** → walking uphill (generates more work)
 - **Improves** → stop walking (stand) is better than sitting due to pressure gradient
- **Cervical myelopathy:**
 - Hand assessment
 - Coughing, straining
 - **Pain** → **night or not relived by rest (Tumor or Infection)** Vs at day-time “with movement” **and relived by rest** (Mechanical pain)
 - Immunosuppression (dm, autoimmune disease, steroids or other medications”

Shoulder

- ❖ **Age of the patient**
 - **Younger** patients more:
 - **Shoulder instability,**
 - **Acromioclavicular joint injuries**
 - **impingement in athletes**
 - **Older** patients more:
 - **Rotator cuff injuries.**
 - **Degenerative joint problems** arthritis (OA)
 - **Adhesive capsulitis (frozen shoulder),**
 - **Humerus fracture (after fall)**

- ❖ **Mechanism of injury**
 - Abduction & external rotation → dislocation of the shoulder
 - **Chronic pain upon overhead activity or at night-time → rotator cuff problem**

- ❖ **Pain where:**
 - Rotator Cuff → anterolateral & superior
 - Bicipital tendonitis → referred to elbow

- ❖ **Stiffness, Instability, Clicking, Catching, Grinding:**
 - Initial trauma? What position? How often?

- ❖ **Weakness → if large tear in the R.C, not as neurological**

- ❖ **Loss of function:**
 - **Home:**
 - Dressing → coat
 - Grooming → toilet, brushing hair
 - Lift objects
 - Arm above shoulder → top shelves, hanging
 - **Work and Sport**

- ❖ **Referred pain → cardiac ischemia, mediastinal disorders or GI**

Knee

- ❖ **Age**
 - Young : **Trauma: ligamentous** or meniscal injury, **fracture**
 - Middle aged, elderly : **Arthritis**

- ❖ **Injury → For example: ACL**
 - Mechanism → position of leg at time of injury (Cutting or pivoting)
 - **Direct trauma / indirect**
 - Audible **POP**
 - Did it swell up:
 - **Immediately (hemarthrosis)**
 - **Delayed (traumatic synovitis)**
 - What first aid was done/treated?
 - Could continue football match or had to leave?

- ❖ **Stiffness:**
 - **Without locking:** Arthritis, effusion
 - **With locking/catching:** Loose body, meniscal tear (esp. **bucket handle**), arthritis
- ❖ **Giveaway or Instability?**
- ❖ **Onset: Insidious** → as **O.A** vs **Acute** → as Trauma: fx, dislocation, soft tissue (ligament/meniscus) injury.
- ❖ **Systemic** (Fever, chills) Ex: Infection, septic joint, tumor
- ❖ **Activity**
 - Walking distance
 - Walking aid
 - How pray → regular or chair
 - Cross legs on ground
 - Squat (traditional toilet)
 - Old injury intra-articular

• Analysis of the most common MSK symptoms:

(Questions for specific symptoms)

Pain	Instability
<ul style="list-style-type: none"> • Location <ul style="list-style-type: none"> ▪ Point with a finger to where it is • Radiation <ul style="list-style-type: none"> ▪ Does the pain go anywhere else? • Character (ex: Sciatica has sharp shooting pain) • How long have you had the pain? • How did it start? <ul style="list-style-type: none"> ▪ Injury: <ul style="list-style-type: none"> ○ Mechanism of injury ○ How was it treated? ▪ Insidious • Progression <ul style="list-style-type: none"> ▪ Is it better, worse, or the same? • When <ul style="list-style-type: none"> ▪ Mechanical / Walking ▪ Rest ▪ Night ▪ Constant • Aggravating & Relieving Factors <ul style="list-style-type: none"> ▪ Stairs ▪ Start up, mechanical ▪ Pain with twisting & turning ▪ Up & down hills ▪ Kneeling ▪ Squatting 	<ul style="list-style-type: none"> • Onset • How dose it start? • Any Hx of trauma? • Frequency • Trigger/aggravated factors • Giving way (I cannot trust my leg) • Locking • Associated symptoms <ul style="list-style-type: none"> ▪ Swelling ▪ Pain • Mechanical Symptoms <ol style="list-style-type: none"> 1. <u>Locking / Clicking</u> Due: <ul style="list-style-type: none"> ○ Loose body, ○ Meniscal tear <ul style="list-style-type: none"> ❖ Locking vs. pseudo-locking 2. <u>Giving way</u> Due: <ul style="list-style-type: none"> ○ ACL 3. Patella
Deformity	Swelling
<ul style="list-style-type: none"> • When did you notice it? • Progressive or not? • Associated with symptoms → pain, stiffness, ... • Impaired function or not? • Past Hx of trauma or surgery • PMHx (neuromuscular, polio) <p>❖ Common deformities:</p> <ol style="list-style-type: none"> 1. Hallux valgus 2. Genu Varum/Valgus 3. Scoliosis/Kyphosis/Lordosis..etc 	<ul style="list-style-type: none"> • Onset • Duration • Painful or not • Local vs. generalized • Constant vs. comes and goes • Size progression: same or ↑ • Rapidly or slowly • Aggravated & relived factors • Associated with injury or reactive • From: soft tissue, joint, or bone

Limping	Loss of function
<ul style="list-style-type: none"> • Onset (acute or chronic) • Traumatic or non-traumatic ? • Painful vs. painless • Progressive or not ? • Use walking aid ? • Functional disability ? • Associated → swelling, deformity, or fever. • Constitutional symptoms • Recent infections 	<ul style="list-style-type: none"> • How has this affected the patient's life • Home (daily living activities DLA) <ul style="list-style-type: none"> ▪ Prayer ▪ Squat or kneel for gardening ▪ Using toilet ▪ Getting out of chairs / bed ▪ Socks ▪ Stairs ▪ Walking distance ▪ Go in & out of car • Work • Sport <ul style="list-style-type: none"> ▪ Type & intensity ▪ Run, jump
Altered sensation*	Stiffness*
<ul style="list-style-type: none"> ❖ Tingling or numbness signifies interference with nerve function – pressure from a neighboring structure (e.g. a prolapsed intervertebral disc), local ischemia (e.g. nerve entrapment in a fibro-osseous tunnel) or a peripheral neuropath ❖ It is important to establish its exact distribution; from this we can tell whether the fault lies in a peripheral nerve or in a nerve root. - What makes it worse or better? 	<ul style="list-style-type: none"> - Generalized or localized ○ Generalized => RA , ankylosing spondylitis ○ Localized => to a particular joint. - When it occurs? ○ Early morning => RA ○ After periods of inactivity => osteoarthritis - Locking? ○ Locking' is the term applied to the sudden inability to complete a particular movement. It suggests a mechanical block – for example, due to a loose body or a torn meniscus becoming trapped between the articular surfaces of the knee. - Duration
Weakness*	
<ul style="list-style-type: none"> ❖ Generalized weakness is a feature of all chronic illness, and any prolonged joint dysfunction will inevitably lead to weakness of the associated muscles. ❖ However, pure muscular weakness – especially if it is confined to one limb or to a single muscle group – is more specific and suggests some neurological or muscle disorder. - Which movements are affected? 	

* How to take history for these symptoms wasn't mentioned in Dr's slides, so I took them from Apley's.

● Important Points in orthopedic emergencies:

(questions for specific conditions)

1) Bone and joint infections

- **Generally:** symptoms you might see infectious disease: **Pain, fever, malaise, restlessness, loss of function**
- **Locally:** **swelling** at a limb usually near a joint like knee or hip or shoulder with **increased local temperature**.

A) TB

- Personal information: Ask about **job** (maybe he/she is a doctor and didn't take precaution)
- Hx: **Weight loss/anorexia , Fever , Night sweats** may present with pain (depends on the location)
- Contact **with TB or sick patient**
- Past medical hx : History of infections (TB) or Immunocompromised
- Surgical Hx
- Past drug Hx:
- Family Hx History of **infection in the family**
- Social Hx Living situation
- **Travel Hx**

B) TB Spine (Pott's disease)

- May present with **back pain !!** Not related to mechanical cause, the rest of symptoms are above **(Fever and weight loss)**
- TB could occur in the spine: **Thoracic** (50%) – lumbar (25%) -- – cervical (25%)
- It can be complicated and cause neurological deficits, Abscesses formation that **might cause Cauda equina syndrome**

C) Brucellosis

- Personal information: Ask about job (**farmer who drinks raw milk**)
- Hx: **Back pain, Fever**, Wight loss, **Night Sweats**, Joint pain or Swollen lymph node
- Travel Hx

D) Osteomyelitis

- **Risk factors:** Extremes of age, post-op (ex: ORIF), open fracture, SCA, Hemodialysis, Immunosuppressed, chronic vascular disease.
- *Hx: **Pain & Swelling** (worse with exercise, morning < 30min) Fever, Malaise, Restlessness ,Loss of function and .

E) Chronic OM

Common in: Inappropriately treated acute OM, Trauma pt, Immunosuppressed, Diabetics or IV drug abusers

F) Septic Arthritis

- Hx: **Pain, Swollen, red and warm joint. Fever.**

Risk factors: Existing joint problems, Weak immune system, Joint trauma, Arthroscopy, Extended OM (Children), RA, IV drug abuser, Brucella "CHRONIC MONO SEPTIC A." (its risk factor mentioned before), STD (gonococci "POLYSEPTIC A.),

2) Compartment syndrome:

❖ Risk factors (causes):

- ✓ Trauma "fractures or soft tissue injury"/ Burns "circumferential" / Injections
- ✓ Bleeding within the compartment (Coagulopathy or on anticoagulants)
- ✓ Prolonged vascular occlusion (Reperfusion Injury)
- ✓ Venomous bite Intra-osseous
- ✓ fluid replacement
- ✓ IV fluid extravasation
- ✓ Tight bandage Post-surgery
- ✓ Tight Cast or Splints
- ✓ Prolonged limb compression

*Hx:

- ✓ Most important sign is **PAIN** (Pain that seems greater than expected for the severity of the injury). "POOP"
- ✓ It **increases while Passive stretching the involved compartment**
- ✓ Presence of Risk Factors: like tibia fracture, DM and hypertension.
- ✓ 4 Ps: **Paralysis, Paresthesia, Pallor and Pulselessness.**

3) Acute joint dislocation:

- Pain (Analysis before)
- Ask how did he/she fall down (**mechanism**)? Trauma? He/she might had Stroke for example, or just slipped?
- What was the limb position at the time of the injury? **EX:** If the mechanism was falling? On Stretched hand? On flexed Elbow?
- Is this the first time or it is recurrent or there is any previous dislocations? If yes ask about how it was managed, and the result of any radiographs done to him/her?
- If it is a recurrent, ask the patient if he or she popped the shoulder back in or if it just went back in by itself?
- Ask about any numbness, weakness and pain ..sign/symptoms of (compartment syndrome and neurovascular involvement)

A) Subacromial impingement Syndrome:

- Nocturnal pain, **exacerbated by lying on the involved shoulder or sleeping with the arm overhead**
- Exacerbation of symptoms with: • Shoulder elevation at or above 90° • With lifting items Away from the body. (**Overhead activity**)

B) Rotator cuffs tear:

- Pain (more pain in partial tear) + stiffness

C) Adhesive capsulitis:

- Gradual stiffness and pain (not related to overhead activity) in the Shoulder + ask about history of **DM**
- **Risk factors:**
- Women 40-60 years. Thyroid dysfunction (hypo & hyper) Cervical spondylosis (arthritis). Breast cancer treatment (tamoxifen). Cerebrovascular accident. Cardiovascular disease Diabetes mellitus

4) Fractures:

- **Site:** Imp
- Previous pain at the site of injury
- **Mechanism of injury** (RTA – Syncope – Falling – Slipping – Or minor trauma) (usually high energy trauma) or low energy with pt with any osteoporosis risk factors
- If RTA: Speed – Seatbelt – Ejection – Site in the car – What happened to others?
- If Falling: Height? Position of the falling “**Ex: Standing -> Pelvic fracture**” ?
- **Any contamination** with wound like **soaked in soil** limb?
- **PMH:** DM, Peripheral vascular disease or immunosuppression
- **PSH:** History of other previous fracture.
- **Social:** Smoking ? Occupation?

5) Peripheral Neuro/Vascular:

A) Carpal Tunnel Syndrome

- **Risk Factors:** Obesity - Pregnancy - Diabetes - Thyroid disease -Chronic renal failure - Inflammatory arthropathy - Vitamin deficiency - Storage diseases - Alcoholism - Advanced age, Wrist trauma.
- **Hx:** Paresthesia and pain, often at night on the volar aspect (thumb - index - long - radial half of ring) Affected first → light touch + vibration Affected later → pain and temperature
- Late findings: Weakness - loss of fine motor control - abnormal two-point discrimination

B) Cubital Tunnel Syndrome

- **Symptoms:** Pain and numbness in the elbow Tingling, especially in the ring and little fingers
History of sport and soft tissues injuries It will be swelling, or pain takes history- then ask about bruises or discolorations.

6) Cauda equina Syndrome

- Ask about the causes, it can due to :
 1. **traumatic injury** (If yes ask all the trauma related question mentioned before)
 2. **disk herniation, Spinal stenosis , spinal tumors** (neoplasms), Most common is metastatic so, ask about hx of other malignancies ,
 3. **Inflammatory conditions** Ex: Paget's disease and ankylosing spondylitis,
 4. **infectious conditions** EX: spinal epidural abscess
 5. **iatrogenic causes** Ex: Lumbar puncture.
- Ask about **Low back pain or “radiculopathy”** pain in one leg (unilateral) or (bilateral) that starts in the buttocks and travels down the back of the thighs and legs
- **Character** (radicular pain) is generally a sharp, stabbing pain resulting from compression of the nerve roots. Radicular pain projects along the specific areas controlled by the compressed nerve (known as a dermatomal distribution).
- **Numbness** in the groin or area of contact if sitting on a **saddle** (perineal or saddle paresthesia)
- **Bowel disturbances (Loss of anal tone and sensation “PR exam” and incontinence “Inability to stop or feel a bowel movement”**
- **Bladder disturbances** (urinary retention, incontinence)
- Lower extremity muscle weakness and loss of sensations
- Reduced or absent lower extremity **reflexes**

8) Bone tumors:

- Hx:
- **Gender + Age + job**
- Presenting illness: Pain, Swelling? when +onset + character if change in color or with discharge.
- Constitutional symptoms (**important**)
- Risk factors of tumors:
- Radiation - Age - Alcohol - Chronic Inflammation - Diet - Hormones - Immunosuppression
 - Infectious Agents - Obesity - Sunlight - Tobacco Female: **Metastasis** from breast mostly
- Males: usually from prostate
- Past medical hx (history of malignancy) is **important**
- Family history **very important.**
- Swelling or Pain, it might be just pain from a fracture that is caused by tumor (Pathological fracture)

A) Osteoid osteoma:

- (Pain more **at night prevent the patient from sleep**) Important to ask

B) Endochondroma:

- **Mostly affect digits** and in the history the patient mostly will complain that he or she can't put a (ring)

C) Ewing sarcoma:

- Same presentations of osteomyelitis (swelling, pain) ask about previous history of trauma and previous medical history.

But always make the first differential is infection before tumors

9) Back pain history:

Spinal	Extra-spinal
<ul style="list-style-type: none"> ▪ Muscular strain ▪ Vertebral fracture ▪ Lumbar disk herniation ▪ Tumor ▪ Spinal infection ▪ Cauda equina syndrome ▪ Spinal Stenosis 	<ul style="list-style-type: none"> ▪ Abdominal aortic aneurysm ▪ Renal: pyelonephritis, nephrolithiasis ▪ Gastrointestinal: pancreatitis, perforating peptic ulcer ▪ Urogenital: endometriosis, pelvic inflammatory disease.

- Demographic: Name, Age and Occupation
- Pain (SOCRATES)
- Constitutional symptoms
- Trauma history
- **Rule Out Red flags** first then start with others:
 - Cauda Equina Syndrome (Urinary retention with overflow – fecal incontinence – saddle anesthesia).
 - Tumor (previous history of cancer and presence of constitutional symptoms).
 - Infection (previous history of infection, family history of infection, Drug abuse, Travel history and constitutional symptoms).
 - Spine fracture (History of recent trauma and history for other fracture).
- **Rule Out other diseases:**
 - No Menstrual Cycle changes (endometriosis and PID).
 - No History of renal colic or UTI (pyelonephritis, nephrolithiasis).
 - No GI Symptoms (pancreatitis, perforating peptic ulcer).
- Medical history
- Surgical history
- Family history
- Social history (Smoking – Allergy – Occupation – Alcohol – IV drug abuse - Travel)

A) Lumbar Disk herniation:

- Increase with flexion – lifting heavy weight - radiculopathy

B) Osteoarthritis:

- C/O: Joint pain, stiffness, and /or functional limitation. (Analysis mentioned before)
- **Look for risk factors:**
 - **Age**
 - Obesity
 - **Trauma**
 - Genetics (significant family history)
 - Reduced levels of sex hormones (menopause)
 - Muscle weakness
 - **Repetitive use** (ie, jobs requiring heavy labor and bending)
 - **Infection**
 - Crystal deposition
 - Previous inflammatory arthritis (eg, burnt-out **rheumatoid arthritis**)
 - Heritable metabolic causes (eg, alkaptonuria, hemochromatosis, Wilson disease)
 - Hemoglobinopathies (eg, **sickle cell disease** and thalassemia)
 - Neuropathic disorders leading to a Charcot joint (eg, syringomyelia, tabes dorsalis, and **diabetes**)
 - Underlying morphologic risk factors (eg, **congenital hip dislocation and slipped femoral capital epiphysis**)
 - Disorders of bone (eg, Paget disease and avascular necrosis)
 - Previous surgical procedures (eg, **meniscectomy**)

10) Pediatric:

A) Developmental Dysplasia of the Hip (DDH)

- Mechanical causes:
 - Pre natal => Breach , oligohydrominosis , primigravida , twins (Torticollis, metatarsus adductus)
 - Post natal => Swaddling, strapping
 - Other causes: First pregnancy Large baby
 - **Infants at risk:**
 - Positive family history: 10X
 - A baby girl: 4-6 X
 - Torticollis: CDH in 10-20% of cases
 - Foot deformities: Calcaneo-valgus and metatarsus adductus
 - Knee deformities: Hyperextension and dislocation
- Hx: You might notice that one leg is longer than the other. One hip may be less flexible than the other.

A) Slipped capital femoral epiphysis (SCFE)

- Age. Typical: **8-12 yr** ⓘ
- More common in **males**, in **obese**, in **black**.
- Hx: Hip pain /? **Knee pain** (only) Minor trauma No trauma
- **Limping (painful) Problems walking. Less movement than usual in the hip.**

B) Developmental Dysplasia of Hip

- More common in **females**
- **Hx:** leg discrepancy one is **shorter** than the other (usually left side 60%). Or the leg is **dislocated** from the hip and turn outward. Or/and The **folds** in the skin of the thigh or buttocks may appear uneven
- **Risk factors:**
 - **Prenatal** → Breech , oligohydramnios , primigravida , twins (Torticollis, metatarsus adductus).
 - **Postnatal** → Swaddling, strapping
 - **Other:** First child
- **Positive family history:** Parents are relatives, Other kid with same disease 10X, A baby girl: 4-6 X
- Can be **associated** with **Torticollis:** CDH in 10-20% of cases “Short neck”
- **DDX:** mention 3: DDH, Intoeing, SCFE, Perths, Rickets, Blount disease.
- **Complications:** mention two
 - Severe hip and/or back pain.
 - Early hip arthritis
 - Leg Length Discrepancy (LLD)
 - Pelvic inequality
 - Early Lumbar spine degeneration
 - Secondary scoliosis
- **Investigations:**
 - U/S → after 21 days.
 - Pelvic X-Ray → After 3 month or after 5-6 mo (more reliable).
- **Management:**
 - Conservative: → Pavlik harness, Spica cast, Broom-stick cast
 - Minimally invasive: → Arthrogram guided closed reduction
 - Operative: Open reduction, Acetabuloplasty, Femoral shortening, Salvage pelvic osteotomy

B) Perthes

- **Hx:** Hip pain or knee pain Minor trauma or no trauma Painful limping Limited range of motion of the hip joint.

C) Leg Aches

- **Hx:** At long bones of L.L (Bil) Dull aching, poorly localized Can be without activity At night Of long duration (months) Responds to analgesia.

D) Limb Length Inequality

- **Hx:** Gait disturbance Equinus deformity Pain: back, leg Scoliosis (secondary)

EXTRA

Foot and ankle pain or swelling:

Risk factor: athletes

-Plantar Fasciitis:

Pain, **character is stabbing pain** when he put his weight while walking.

Pain usually in **morning and become less after walking**.

Pain is localized in heel.

-Ankle sprains:

Pain + Swelling + Bruise or redness

Ask about previous activities or history of same condition before.

(Q/ MOST COMMON ? Ant.Talofibular ligament lateral side)

Don't forget in pain ask if it's associated with rest and activity and daytime or nighttime.

-Osteochondral defect:

Ask about recent trauma and pain if present in REST. If patient came with cuts in his or her leg with **no pain** think of **DM Foot**.

Ask about **associated symptoms (neuropathic) senseless and tingling + specific DM symptoms like polyuria, weight loss, thirst and hunger**.

Remember in your differential don't forget to say **Charcot foot**. Because it's resulted from neuropathy in the foot. Always ask about history of DM and if it was controlled or not.

Metabolic bone diseases:

Hx:

Pain Constitutional symptoms

Risk factors: Sun exposure + previous history of pain or fracture at any site or same site

Past medical: steroids? Social: smoking? Drinking? Drug abuser? Family Hx Inheritance disorders?

(Important)

Child: crying with no obvious reason, Ask mother if child is growing or not.

Adults: generalized bone pain mainly backache (ask about previous episodes of the same presentation) ask about pain, then ask about (past medical history and surgical of fractures) most fracture appears in femoral head (stress fracture) OA at wrist (colles).

Osteoporosis:

Look at the age first (female after **menopause**, decrease estrogen).

Ask about **smoking** /alcohol/ drug abuse - ask about **history of fractures or trauma**,

Ask about pain and previous pain at the site to differentiate with other pathological Bone disease because no pain in osteoporosis.

If it happens in young age group 45yo rule out these causes:

Drug induced: steroids, alcohol, smoking, phenytoin, and heparin. Hyperparathyroidism, Hyperthyroidism, Cushing syndrome, gonadal disorders, malabsorption, malnutrition. Chronic diseases: RA, renal failure, tuberculosis.

Malignancy: multiple myeloma, leukemia, metastasis