History Taking in Orthopedics

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History taking

- Patient's story
- Doctor/student reconstructs the history
  - Open ended questions
    - How do you feel now
  - Leading questions
    - Where is the pain?
    - Can you open a door key?
    - Can you raise your hand up?
Orthopedics History

- History Structure:
  - Patient Demographic
  - Chief Complaint
  - History of Presenting Complaint
  - Past medical/surgical history
  - Medication history
  - Family history
  - Personal history and background
  - Diet
  - Activity
  - Systemic review
Orthopedics History

• Patient Demographic
  • Name
  • Age
  • Occupation
  • Hand Dominant
Orthopedics History

• Chief Complaint:
  • Site
  • Onset
  • Progression
  • Management
Orthopedics History

• History of Presenting Complaint
  • Pain
  • Swelling
  • Deformity
  • Limping
  • Stiffness
    • Usually related to function
  • Loss (altered) function
    • Caused by: stiffness / pain / deformity / instability / weakness
  • Altered sensation
Orthopedics History

• Pain
  • Site
  • Onset
  • Character
  • Radiation
  • Associations
  • Time course
  • Exacerbating/relieving factors
  • Severity
Orthopedics History

• Pain
  • Site:
    • Diseased area
  • Referred
    • Pain perceived at a location other than the site of the painful stimulus
      • Neck, shoulder: to arm
      • Lumbar and L-S spine: to groin, gluteal region
      • Hip: to thigh and knee
  • Radiating to: (separate from referred)
    • In diseased area and radiating to another site
Orthopedics History

• Pain
  • Onset:
    • When did it start?
    • Was it
      • Gradual or sudden? (acute – related to incident/action)
      • Constant or intermittent?
Orthopedics History

• Pain
  • Character:
    • What is the pain like e.g.
      • Sharp,
      • Burning
      • Tight?

• Radiation:
  • Pain perceived at the site of stimulus and radiate to another site
  • Does it radiate/move anywhere?
Orthopedics History

• Pain
  • Associations:
    • Is there anything else associated with the pain e.g.
      • Swelling
      • Sweating
      • Fever
      • Vomiting

• Time course:
  • Does it follow any time pattern, how long did it last?
Orthopedics History

• Pain
  • Exacerbating/relieving factors:
    • Does anything make it better or worse?

• Severity:
  • How severe is the pain
  • Consider using the 1-10 scale
Orthopedics History

• **Stiffness**
  - Patients complain of loss of/altered function, not stiffness
    - Can not comb hair, can not bend forward, can not sit cross-legged, can not sit in prayer, ...
  - Joint involved
  - Cause:
    - Real stiffness of joint / mechanical block
    - Protective mechanism:
      - Muscle spasm to avoid pain on movement of joint
  - Generalized: systemic disease
    - e.g. Rheumatoid Arthritis, Ankylosing spondylitis
  - Localized
    - To a particular joint
Orthopedics History

• Swelling
  • Soft tissue, joint, bone
  • After trauma:
    • Injury or reactive
  • Rapid or Slow developing
    • Rapid: bleeding / Slow: effusion
  • Painful vs. Painless
  • Constant vs. comes and goes
  • Size:
    • Same, increasing, decreasing
Orthopedics History

• Deformity
  • Progressive, or improving?
  • Impairing function?
  • Associated with
    • Pain
    • Stiffness
    • Other metabolic diseases
Orthopedics History

• **Functional affection:**
  • Relate to normal function of part
    • Walking
    • Bending, Praying
    • Going to toilet
    • Sitting cross-legged
    • Eating
    • Reaching,
    • Holding,
    • Opening,
    • etc…
Orthopedics History

- **Instability**
  - Joint “gives way” or “jumps out of place”

- **Weakness**
  - Generalized: part of a systemic disease
  - Localized: Patients usually describe it as:
    - The limb is “dead” / “heavy”
Orthopedics History

• Associated conditions / other diseases

• Careful about history of mild trauma
  • History of mild trauma, especially in children, can be a normal daily occurrence
Orthopedics History

- Past medical/surgical history
- Medication & Allergy history
- Family history
  - Genetic – e.g. RA, CDH
  - Communicable – e.g. TB
- Personal history and background
  - Occupation
  - Travel
  - Recreation
  - Home condition
  - Drug or Alcohol abuse
Orthopedics History

• Diet
  • Food / drinks (good and bad!)
  • Sun exposure

• Activity

• Systemic review
  • Respiratory – e.g. TB
  • UTI – source of infection
  • GIT – deficiency
  • Renal – disease
Trauma History

• Details discussed in:
  • “PRINCIPLES OF FRACTURES”

• Either Low or High energy trauma
Trauma History

• Low Energy:
  • When, How & Where?
• AMPLE History:
  • Allergy,
  • Medication,
  • Past Medical & Surgical Hx,
  • Last Meal,
  • Event
• Weight bearing status
Trauma History

• High Energy:
  • Road Traffic Accident (RTA)
    • Low injury Qs, and:
    • Driver / Passenger / Pedestrian
    • Seat belted / non-belted
    • Speed at impact
    • Location of impact
    • Position of the patient and the limb at impact
    • Severity of crash (required jaws of life, anyone died in crash, thrown from the car, rollover ... etc)
Trauma History

- High Energy:
  - Road Traffic Accident (RTA)
  - Driver / Passenger / Pedestrian

DON'T TEXT & DRIVE.
Trauma History

• High Energy:
  • Fall from Height
    • Low injury Qs
    • How many levels
    • Position of the patient and the limb at impact
    • Missed injuries – combination injuries
Trauma History

- Date
- Mechanism of injury
- Loss of consciousness
- Pain
- Wound
- Bleeding
- Function
- Progression of injury and management
Trauma History

• Details of injury
  • Mechanism, force, bleeding, consciousness, ...

• Details of facture
  • Deformity, pain, loss of function, ...

• Other medical problems

• Anti-tetanus status if open injuries

• Careful:
  • Fractures are not always at the site of impact
  • Some fractures do not need severe force
Type of injury

• Mechanism of injury helps expect the
  • Extent and type of bone injury
    • Simple / comminuted / complex
  • Associated fractures/injuries
    • Fall from height on feet
      • fractured calcaneus and lumbar spine
    • Car dashboard injuries
      • fractured patella and hip dislocation
  • Extent of soft tissue injury
  • Suggests treatment and reduction technique
  • Expected prognosis
Summary – History-taking

• **Chief complaint**
  • Onset, Progression, Management
    • Pain
    • Swelling
    • Deformity
    • Limping
    • Stiffness
    • Loss (altered) function
    • Altered sensation
  • Detailed mechanism of injury in trauma
    • High velocity Vs. Low velocity
    • Open Vs. Closed

 Relate to function