

- Chapter 1

Basic and Advanced Interviewing Techniques

Basic maximize patient's comfort, avoid unnecessary changes in position, enhance clinical efficiency, move head to toe, examine the patient from their right side

Active listening, empathic responses, guided questioning, nonverbal communication, validation, reassurance, partnering, summarization, transitions, empowering the patient

Active Listening- closely attending to what the patient is communicating, connecting to the patient's emotional state and using verbal and nonverbal skills to encourage the patient to expand on his or her feelings and concerns.

Empathic Responses-the capacity to identify with the patient and feel the patient's pain as your own, then respond in a supportive manner.

Guided Questioning- show your sustained interest in the patient's feelings and deepest disclosures and allows the interviewer to facilitate full communication, in the patient's own words, without interruption.

Non-verbal- includes eye contact, facial expression, posture, head position and movement such as shaking or nodding, interpersonal distance, and placement of the arms or legs-crossed, neutral, or open.

Validation- helps to affirm the legitimacy of the patient's emotional experience.

Reassurance- an appropriate way to help the patient feel that problems have been fully understood and are being addressed.

Partnering- building rapport with patients, express your commitment to an ongoing relationship.

Summarization- giving a capsule summary of the patient's story during the course of the interview to communicate that you have been listening carefully.

Transitions- inform your patient when you are changing directions during the interview.

Empowering the Patient- empower the patient to ask questions, express their concerns, and probe your recommendations in order to encourage them to adopt your advice, make lifestyle changes, or take medications as prescribed.

Advanced: Determine scope of assessment: Focused vs. Comprehensive: pg5

Comprehensive: Used for patients you are seeing for the first time in the office or hospital. Includes all the elements of the health history and complete physical examination. A source fundamental and personalized knowledge about the patient, strengthens the clinician-patient relationship.

- Is appropriate for new patients in the office or hospital
- Provides fundamental and personalized knowledge about the patient
- Strengthens the clinician–patient relationship
- Helps identify or rule out physical causes related to patient concerns
- Provides a baseline for future assessments

- Creates a platform for health promotion through education and counseling
- Develops proficiency in the essential skills of physical examination

Flexible Focused or problem-oriented assessment: For patients you know well returning for routine care, or those with specific “urgent care” concerns like sore throat or knee pain. You will adjust the scope of your history and physical examination to the situation at hand, keeping several factors in mind: the magnitude and severity of the patient’s problems; the need for thoroughness; the clinical setting—inpatient or outpatient, primary or subspecialty care; and the time available.

- Is appropriate for established patients, especially during routine or urgent care visits
- Addresses focused concerns or symptoms
- Assesses symptoms restricted to a specific body system
- Applies examination methods relevant to assessing the concern or problem as thoroughly and carefully as possible

Tangential lighting: JVD, thyroid gland, and apical impulse of heart.

Components of the Health History Jenna/Ashley

Initial information

Identifying data and source of the history; reliability

Identifying data- age, gender, occupation, marital status

Source of history- usually patient. Can be a family member or friend, letter of referral, or clinical record.

Reliability- Varies according to the patient’s memory, trust, and mood.

Chief Complaint

Chief Complaint- Make every attempt to quote the patient’s own words.

Present Illness

Complete, clear and chronological description of the problem prompting the patient visit

Onset, setting in which it occurred, manifestations and any treatments

Should include 7 attributes of a symptom:

- Location
- Quality
- Quantity or severity
- Timing, onset, duration, frequency
- Setting in which it occurs
- Aggravating or relieving factors
- Associated manifestations

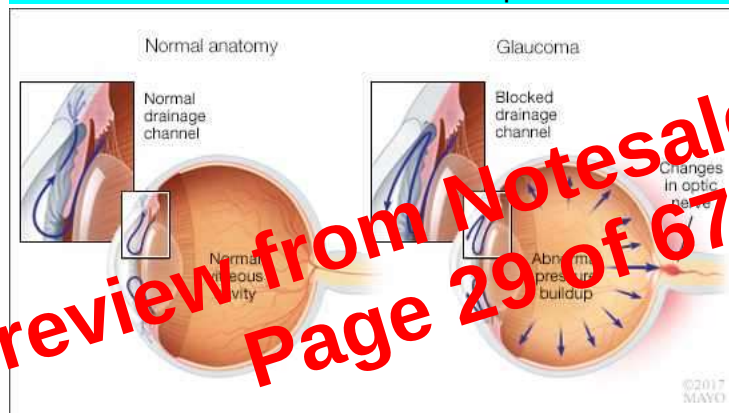
-Differential diagnosis is derived from the “pertinent positives” and “pertinent negatives” when doing Review of Systems that are relevant to the chief complaint. A list of potential causes for the patients problems.

-Present illness should reveal patient’s responses to his or her symptoms and what effect this has on their life.

and brow, respectively, and spread the lids. Ask the patient to look to each side and down. This technique gives you a good view of the sclera and bulbar conjunctiva, but not of the palpebral conjunctiva of the upper lid. For this, you need to evert the lid.

Cornea and Lens: With oblique lighting, inspect the cornea of each eye for opacities. Note any opacities in the lens that may be visible through the pupil. At the same time, inspect each iris. The markings should be clearly defined. With your light shining directly from the temporal side, look for a crescentic shadow on the medial side of the iris. Because the iris is normally fairly flat and forms a relatively open angle with the cornea, this lighting casts no shadow.

- a. Occasionally, the iris bows abnormally far forward, forming a very narrow angle with the cornea. The light then casts a crescentic shadow as shown here. This narrow angle increases the risk for acute narrow-angle glaucoma a sudden increase in IOP when drainage of the aqueous humor is blocked. In open-angle glaucoma, the common form of glaucoma, the normal spatial relation between iris and cornea is preserved and the iris is fully lit.



- b. Pupils. Light each eye from the side for inspection. In a dim light, inspect the size, shape, and symmetry of both pupils. Measure the pupils with a card showing black circles of varying sizes, and test the light reaction. Note if the pupils are large (>5 mm), small (<3 mm), or unequal.
 - Miosis refers to constriction of the pupils
 - Mydriasis to dilation.
- c. Pupillary sizes. Simple anisocoria, or a difference in pupillary diameter of 0.4 mm or greater without a known pathologic cause, is visible in approximately 35% of healthy people, and rarely exceeds 1 mm.
 - Simple anisocoria is considered benign if it is equal in dim and bright light, and there is brisk pupillary constriction to light (the light reaction).
- d. The Light Reaction. In dim light, test the pupillary reaction to light. Ask the patient to look into the distance, and shine a bright light obliquely into each pupil in turn. Both the distant gaze and the oblique lighting help to prevent a near reaction.

Extraocular muscles

establish whether the underlying tissues are air-filled, fluid-filled, or consolidated.

- **Dullness replaces resonance when fluid or solid tissue replaces air-containing lung or occupies the pleural space beneath your percussing fingers.** Examples include: lobar pneumonia, in which the alveoli are filled with fluid and blood cells; and pleural accumulations of serous fluid (pleural effusion), blood (hemothorax), pus (empyema), fibrous tissue, or tumor. Dullness makes pneumonic and pleural effusion three to four times more likely, respectively
- Generalized hyperresonance is common over the hyperinflated lungs of COPD or asthma. Unilateral hyperresonance suggests a large pneumothorax or an air-filled bulla.

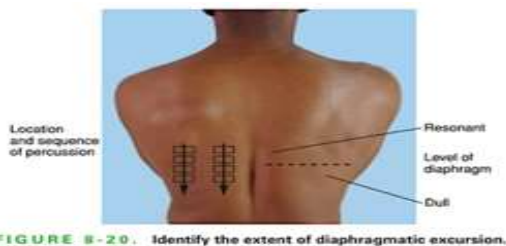


FIGURE 8-20. Identify the extent of diaphragmatic excursion.



FIGURE 8-21. Absent descent of the diaphragm can indicate pleural effusion.

An abnormal finding of dullness suggests a pleural effusion or an elevated hemidiaphragm from atelectasis or phrenic nerve paralysis (Fig. 8-21).

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Percussion Notes and Their Characteristics

	Relative Intensity	Relative Pitch	Relative Duration	Example of Location
Flat	Soft	High	Short	Thigh
Dull	Medium	Medium	Medium	Liver
Resonant	Loud	Low	Long	Healthy lung
Hyperresonant	Very loud	Lower	Longer	Usually none
Tympanitic	Loud	High ^a	Longer	Gastric air bubble or puffed-out cheek

Pathologic Examples

Large pleural effusion
Lobar pneumonia
Simple chronic bronchitis
COPD, pneumothorax
Large pneumothorax

Auscultation:

- Before beginning auscultation, ask the patient to cough once or twice to clear mild atelectasis or airway mucus that can produce unimportant extra sounds.

- Use ladder pattern to assess lungs. Hair can alter sounds; press harder or moisten hair on chest hair.

- Air movement through a partially obstructed nose or nasopharynx can also introduce abnormal sounds.

- Breath sounds usually louder at lower posterior lung fields.

- Breath sounds may be decreased when air flow is decreased (as in obstructive lung disease or respiratory muscle weakness) or when the transmission of sound is poor (as in pleural effusion, pneumothorax, or COPD).

- **EXAMINE ANTERIOR CHEST:** If performed with patient supine, arms should be slightly abducted. Raise HOB in those with difficulty breathing. Persons with severe COPD may prefer to sit leaning forward, with lips pursed during exhalation and arms supported on their knees or a table.

Inspection

- Observe shape, deformities, asymmetry of thorax

- Check for abnormal retraction of the lower intercostal spaces during inspiration, or any supraclavicular retraction

- Abnormal retraction occurs in severe asthma, COPD, or upper airway obstruction

- Local lag or impairment of respiratory movement

- Occurs in disease of lung or pleura

Inspection

- Identify tender area.

- Tender pectoral muscles or costal cartilages suggest, but do not prove, that chest pain has a localized musculoskeletal origin.

- Assess bruising, sinus tracts or skin changes.

- Assess chest expansion.



FIGURE 8-22. Assess chest expansion.

- Tactile fremitus

Normally decreased or absent over precordium

Articular disease typically involves swelling and tenderness of the entire joint, crepitus, instability, "locking," or deformity, and limits both active and passive range of motion due to either stiffness or pain.

● *Extra-articular structures* include periarticular ligaments, tendons, bursae, muscle, fascia, bone, nerve, and overlying skin.

Extra-articular disease typically involves "point or focal tenderness in regions adjacent to articular structures" and limits active range of motion. Extra-articular disease rarely causes swelling, instability, or joint deformity.

-Age also provides clues to causes of joint pain:

■ If age <60 years, consider repetitive strain or overuse syndromes like tendinitis or bursitis, crystalline arthritis (gout; crystalline pyrophosphate deposition disease [CPPD]) (males), rheumatoid arthritis (RA), psoriatic arthritis and reactive (Reiter) arthritis (in inflammatory bowel disease [IBD]), and infectious arthritis from gonorrhea, Lyme disease, or viral or bacterial infections.

TYPES OF JOINTS	EXTENT OF MOVEMENT	EXAMPLE
Synovial	Freely moveable	Knee, shoulder
Cartilagenous	Slightly moveable	Spine/vertebral column
Fibrous	Immoveable	Bones of the skull

Normal vs Abnormal Findings and Interpretation:

Steps for Examining the Joints

1. Inspect for joint symmetry, alignment, bony deformities, and swelling
2. Inspect and palpate surrounding tissues for skin changes, nodules, muscle atrophy, tenderness.
3. Assess range of motion and maneuvers to test joint function and stability and the integrity of ligaments, tendons, bursae, especially if pain or trauma
4. Assess any areas of inflammation, especially tenderness, swelling, warmth, redness.

Tips for Assessing Joint Pain--Acute joint pain typically lasts up to 6 weeks; chronic pain lasts >12 weeks.

JOINT PAIN CONSIDERATIONS:

- True pain from the hip joint is typically described in the groin.
- Sacral/sacroiliac pain is often in the buttock.
- Trochanteric pain from bursitis occurs on the lateral thigh.
- Generalized "aches and pains" are called myalgias if in muscles, and arthralgias if there is pain but no evidence of arthritis.
- Severe pain of rapid onset in a red swollen joint suggests acute septic arthritis or crystalline arthritis/gout in adults; or osteomyelitis in children.

- Inflammation with fever and chills is seen in septic arthritis and gout.
- Morning stiffness that gradually improves with activity is more common in inflammatory disorders like RA.
- Intermittent stiffness and "gelling" (stiffness that occurs only after inactivity) are frequently seen in OA.
- Monoarticular arthritis can be traumatic, crystalline, or septic.
- Oligoarticular arthritis (2-4 joints) occurs in infection from gonorrhea or rheumatic fever, connective tissue disease, and OA.
- Polyarthritis (4 or more joints) may be viral or inflammatory from RA, SLE, or psoriasis.

Joint Pain and Associated Constitutional Symptoms and Systemic Manifestations from Other Organ Systems: Abnormal Findings

-Some joint problems have associated constitutional symptoms such as fever, chills, rash, fatigue, anorexia, weight loss, and weakness.

-In inflammatory conditions, order labs: Erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), platelet count, and hematocrit.

•Notable skin conditions that may accompany joint pain:

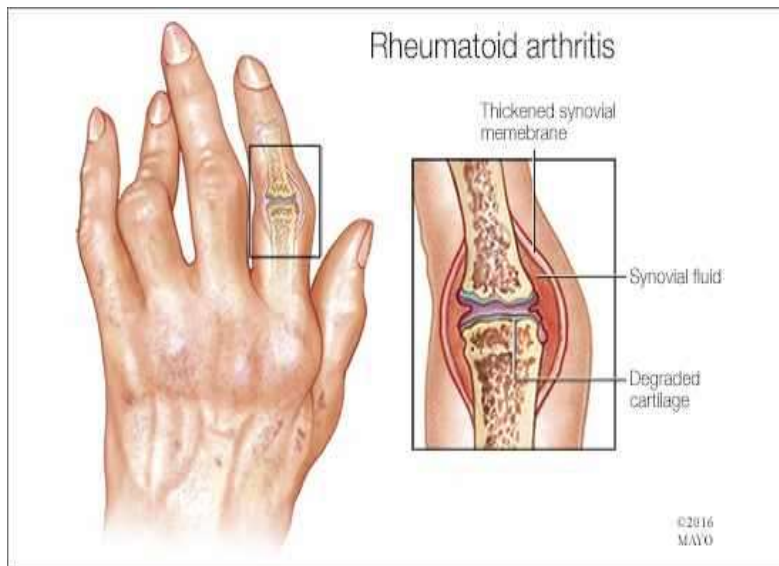
- Butterfly (malar) rash on the cheeks = *Systemic lupus erythematosus*
- Scaly plaques, pitted nails = *Psoriasis*
- Heliotrope rash on the upper eyelids = *Dermatomyositis*
- Papules, pustules, or vesicles on distal extremities = *Gonococcal arthritis*
- Expanding erythematous "bull's-eye" patch (early dz) = *Lyme disease*
- Painful subcutaneous nodules (especially pretibial) = *Sarcoidosis/Behçet dz*
- Palpable purpura = *Vasculitis*
- Hives = *Serum sickness/drug reaction*
- Erosions or scaling on the penis and crusted scaling papules on the soles and palms = *Reactive (Reiter) arthritis (with urethritis, uveitis)*
- The maculopapular rash of rubella = *arthritis of rubella*
- Nailfold capillary changes = *Dermatomyositis, systemic sclerosis*
- Clubbing of the fingernails = *Hypertrophic osteoarthropathy*

•Red, burning, and itchy eyes (conjunctivitis), eye pain and blurred vision (uveitis) = *Ankylosing spondylitis, Reactive (Reiter) arthritis, Behçet dz*

•Preceding sore throat = *Acute rheumatic fever or gonococcal arthritis*

Back Pain - pg 634 one of the most common reasons for office visit

- nonspecific > 90 % sprain or strain related to age related degenerative processes of the intervertebral discs and musculoligamentous injuries
- nerve root entrapment with radiculopathy or spinal stenosis -5%
- underlying disease 1-2 %



Lyme Disease

is a bacterial infection you get from the bite of an infected tick. The first symptom is usually a red rash, which may look like a bull's eye. But not all people with Lyme disease have a rash. As the infection spreads to other parts of the body, you may have a fever. Lyme disease is caused by the bacterium *Borrelia burgdorferi* and rarely, *Borrelia mayonii*. It is transmitted to humans through the bite of infected blacklegged ticks. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, the infection can spread to joints, the heart, and the nervous system. Antibiotics commonly used for oral treatment include doxycycline, amoxicillin, or cefuroxime. People with certain neurological or cardiac forms of illness may require intravenous treatment with antibiotics such as ceftriaxone or penicillin.

Lyme Disease

Systemic disorder characterized by expanding erythematous "bull's eye" rash in early illness which can result in neck stiffness, facial or other weakness and mental status change.

Early Signs and Symptoms (3 to 30 Days After Tick Bite)

"Classic" Erythema Migrans Rash

- Fever, chills, headache, fatigue, muscle and joint aches, and swollen lymph nodes may occur in the absence of rash

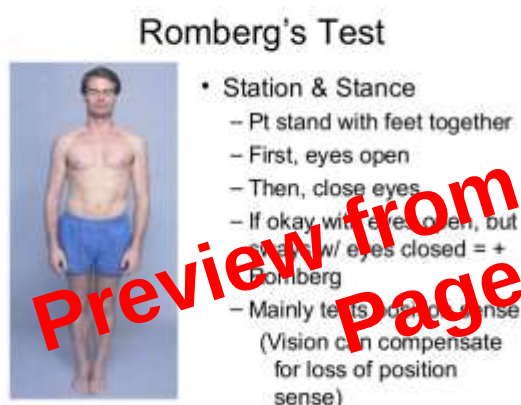
CN XI- Spinal accessory= stand behind the patient, look for atrophy or fasciculations in the trapezius muscles, and compare one side with the other. Ask patient to shrug both shoulders upward against hands.

-Fasciculations= fine flickering irregular movements in small groups of muscle fibers.

-Peripheral nerve disorder= trapezius weakness with atrophy and fasciculations points, the shoulder droops, and the scapular is displaced downward and laterally.

CNXII- Listen to the articulation of the patient's words, inspect the tongue as it lies on the floor of the mouth. Look for any atrophy or fasciculations. Some coarser restless movements are normal. Then with the patient's tongue protruded, look for asymmetry, atrophy, or deviation from the midline. Ask the patient to move the tongue from side to side, and note symmetry of the movement.

Romberg Test- test for position sense. The patient stand fairly well with eyes open but loses balance when they are closed= positive test (Ataxia)



Babinski Reponses (Abnormal)- Dorsiflexion of the big toe. Arising from a CNS lesion affecting the corticospinal tract, can be positive in unconscious states from drug or alcohol. Occasionally accompanied by reflex flexion at hip and knee. **Unconscious states from alcohol and drugs or seizures.**

Plantar reflex



- Generalized epilepsy syndromes- usually begin in childhood or adolescence.
- Tonic-clonic motor activity, bladder or bowel incontinence, and postictal state. Tongue biting or bruising of limbs may occur. Loses consciousness, and the body stiffness into tonic extensor rigidity. Breathing stops and patient becomes cyanotic. A clonic phase of rhythmic muscular contraction follows. Breathing resumes and is often noisy, with excessive salivation.
- Partial- usually adult-onset seizures
- Myclonic (drop attack) - sudden loss of consciousness with falling but no movements.
- Absence- a sudden brief lapse of consciousness, with momentary blinking, starting, or movements of the lips and hands but no falling. Typical <10 sec. Atypical > 10 sec.

Syncope pg 724 Jessica

- Determine if consciousness was lost, external noise or voices throughout the episode, felt light-headed, or weak
- Syncope= sudden but temporary loss of consciousness and postural tone from transient global hypoperfusion of the brain
- Causes= seizures, vasovagal syncope, postural tachycardia syndrome, carotid sinus syncope, orthostatic hypotension, cardiac disease, causes arrhythmias. Stroke and subarachnoid hemorrhage are unlikely unless both hemispheres are affected.
- Vasovagal Syncope- most common cause: prodrome nausea, diaphoresis, and pallor triggered by a fearful or unpleasant event, then vagally mediated hypotension, often with slow onset and offset.
- Syncope from arrhythmias- onset and offset are sudden, reflecting loss and recovery of cerebral perfusion
- Micturition syncope: vasovagal response, sudden hypotension. Precipitating= emptying the bladder after getting out of bed.

Intracranial Pressure

- The normal ICP is 5 - 15 mmHg.

INCREASED INTRACRANIAL PRESSURE

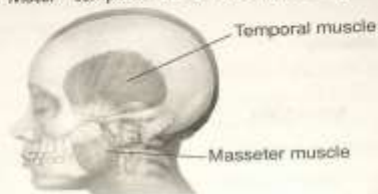


Cranial Nerves

ANATOMY AND PHYSIOLOGY

Cranial Nerves

No.	Name	Function
I	Olfactory	Sense of smell
II	Optic	Vision
III	Oculomotor	Pupillary constriction, opening the eye (lid elevation), and most extraocular movements
IV	Trochlear	Downward, internal rotation of the eye
V	Trigeminal	Motor—temporal and masseter muscles (jaw clenching), lateral pterygoids (lateral jaw movement)



Sensory—facial. The nerve has three divisions: (1) ophthalmic, (2) maxillary, and (3) mandibular.



VI	Abducens	Lateral deviation of the eye
VII	Facial	Motor—facial movements, including those of facial expression, closing the eye, and closing the mouth Sensory—taste for salty, sweet, sour, and bitter substances on the anterior two thirds of the tongue and sensation from the ear
VIII	Acoustic	Hearing (cochlear division) and balance—(vestibular division)
IX	Glossopharyngeal	Motor—pharynx Sensory—posterior portions of the eardrum and ear canal, the pharynx, and the posterior tongue, taste (salty, sweet, sour, bitter)
X	Vagus	Motor—palate, pharynx, and larynx Sensory—pharynx and larynx
XI	Spinal accessory	Motor—the sternocleidomastoid and upper portion of the trapezius



XII	Hypoglossal	Motor—tongue
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