

# EMC 340 Intro to Clinical Medicine

The Head

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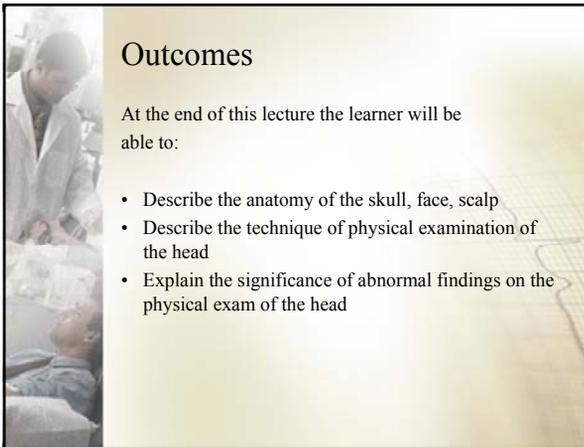
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## Outcomes

At the end of this lecture the learner will be able to:

- Describe the anatomy of the skull, face, scalp
- Describe the technique of physical examination of the head
- Explain the significance of abnormal findings on the physical exam of the head

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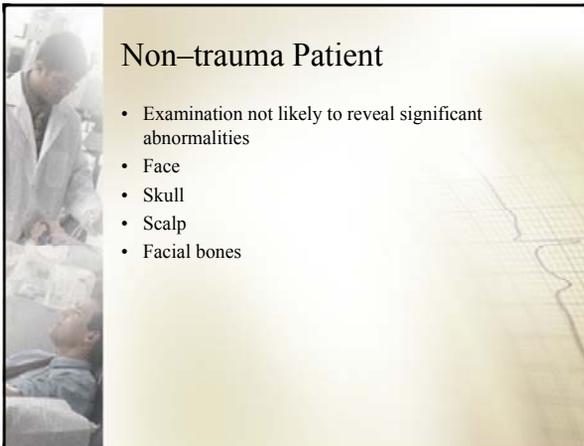
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## Non-trauma Patient

- Examination not likely to reveal significant abnormalities
- Face
- Skull
- Scalp
- Facial bones

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## Occult Trauma

- In ambulatory care settings and in “non-trauma patients” there may be occult trauma
- Brief examination of the head may reveal significant “hidden” pathology

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## Anatomy of the Head

- During the physical exam, keep in mind the anatomical structures.
- Visualizing the underlying anatomy is a good habit to get into with any part of your physical exam.
- The skull is made of **multiple** bones.

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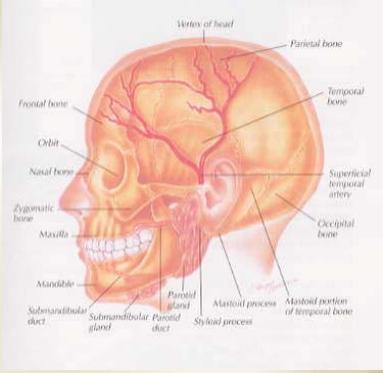
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## The Head



Labels in the diagram include: Vertex of head, Parietal bone, Temporal bone, Superficial temporal artery, Occipital bone, Mastoid portion of temporal bone, Styloid process, Mastoid process, Parotid gland, Submandibular gland, Submandibular duct, Parotid duct, Mandible, Maxilla, Zygomatic bone, Nasal bone, Orbit, and Frontal bone.

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## Practical Exam

Practical: An evaluator assessing a student's ability to palpate the skull, will note if the student is examining each of the components of the skull.

- Temporal bones
- Temporal bones
- Occipital bone
- Frontal bone
- Each of the facial bones (orbit, nose)
- Mandible
- Maxilla

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## Abnormal Findings

Inspection

- Bruising or ecchymosis → Battle's sign
  - Periorbital → late signs of basilar skull fx
- Skin abnormalities (abrasions, lacerations. . .)
  - Temporal artery → R/O arterial bleed → shock

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## Abnormal Findings continued

Palpation

- Crepitation (crepitus)
- Tenderness
- Deformities → depressed skull fx → as with basilar skull fx
- Then R/O brain injury (fx ≠ brain injury)
- Depressed skull fx over temporal bone can lacerate artery just under skull's inner layer
- Risk for subdural hematoma
  - 80% associated with meningeal artery

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## Summary

We have considered:

- Anatomy of the skull, face, scalp
- Techniques of physical examination of the head
- Significance of abnormal findings of head

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