

# H&E — HERNIA

Definition:

Protrusion of a viscus through an abnormal opening in the wall containing it.

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## PART I — HISTORY

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### Chief Complaint

“Swelling in groin × duration”

May also complain of:

- Pain
  - Increase in size
  - Irreducibility
  - Vomiting
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## 2 HISTORY OF PRESENT ILLNESS

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### ◆ A. Swelling

When first noticed?

Gradual or sudden onset?

Gradual → uncomplicated hernia

Sudden painful swelling → obstruction/strangulation

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### ◆ Progression

Increasing in size?

Typical for hernia.

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### ◆ Relation to Straining

Does swelling increase on:

- Coughing?

- Lifting weight?
- Standing?

Yes → suggests hernia.

Why?

Increased intra-abdominal pressure pushes sac outward.

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#### ◆ Reducibility

Does swelling disappear on lying down?

Yes → reducible hernia

No → irreducible

Very important.

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#### ◆ B. Pain

Nature?

- Dull dragging pain → uncomplicated

- Severe continuous pain → strangulation

Pain with vomiting → obstruction.

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- ◆ C. Symptoms of Obstruction

Ask:

- Abdominal distension
- Vomiting
- Absolute constipation

Suggest obstructed hernia.

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- ◆ D. History of Previous Surgery

May suggest incisional hernia.

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- ◆ E. Risk Factors

- Chronic cough

- Constipation
- BPH
- Heavy lifting
- Multiparity
- Obesity

All increase intra-abdominal pressure.

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## PART 2 — EXAMINATION

Examine patient standing first.

Expose from xiphisternum to mid-thigh.

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### A. INSPECTION

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- ◆ Site of Swelling

Above inguinal ligament → inguinal hernia

Below inguinal ligament → femoral hernia

Very important distinction.

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◆ Shape

- Inguinoscrotal swelling
  - Limited to groin
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◆ Skin

- Redness → strangulation
  - Scars → previous surgery
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◆ Cough Impulse

Ask patient to cough.

Visible expansion → hernia.

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- ◆ Reducibility

Does swelling disappear when lying down?

Observe.

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## B. PALPATION

Examine standing and supine.

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- ◆ Temperature

Warm → strangulation.

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- ◆ Tenderness

Severe tenderness → obstruction/strangulation.

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- ◆ Consistency

Soft, compressible → hernia

Firm → omentum

Tense → obstruction

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- ◆ Cough Impulse (Palpatory)

Place fingers over swelling and ask to cough.

Expansile impulse → hernia.

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- ◆ Reducibility

Gently reduce swelling upward and backward.

If gurgling sound → bowel.

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- ◆ Deep Ring Occlusion Test (Very Important)

1. Reduce hernia.

2. Press over deep ring (midpoint of inguinal ligament).
3. Ask patient to cough.

If swelling does NOT reappear → indirect hernia.

If reappears → direct hernia.

Examiner favorite.

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- ◆ Get Above the Swelling

If you cannot get above it → inguinoscrotal hernia.

If you can → likely hydrocele.

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## C. PERCUSSION

Resonant → bowel content

Dull → omentum

Rarely emphasized but good to mention.

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## D. AUSCULTATION

May hear bowel sounds if intestine present.

Shows viable bowel.

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## DIFFERENTIATING DIRECT VS INDIRECT INGUINAL HERNIA

Feature	Indirect	Direct
Age	Young	Elderly
Neck	Narrow	Wide
Direction	Inguinal canal	Direct through posterior wall
Deep ring test	Controlled	Not controlled
Scrotal extension	Common	Rare

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## DIFFERENTIATING INGUINAL VS FEMORAL

Feature	Inguinal	Femoral
Relation to pubic tubercle	Above & medial	Below & lateral
Sex	Males common	Females common
Strangulation	Less	More common

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## COMPLICATIONS

- Irreducibility
- Obstruction
- Strangulation
- Inflammation

Strangulation signs:

- Severe pain
  - Tender
  - No cough impulse
  - Irreducible
  - Vomiting
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### COMMON VIVA QUESTIONS

- Boundaries of inguinal canal?
  - Contents of inguinal canal?
  - Why indirect hernia common in young?
  - Why femoral hernia strangulates more?
  - What is Richter's hernia?
  - What is sliding hernia?
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-> The End <-