UNIVERSITY MEDICINE • EXERCISE SHEET

3.6 Pelvis and perineum

Name: _____ Class: _____ Date: _____ **Total: 23 marks**

KEY WORDS pudendal nerve

Objective

Reason about the pelvic floor, its nerve and the injuries of delivery.

1 Key knowledge and worked examples

■ **The floor and the hook**

Levator ani + coccygeus sling pubis-to-coccyx; pudendal (S2–4) hooks the ischial spine to reach the perineum.

■ **Worked example: the pelvic core**

S2–4 = detrusor, sphincter, perineal sensation, bulbocavernosus reflex ✓ – one cone, one bedside exam.

2 Practice

2.1 Which landmark guides a pudendal block? [3]

2.2 What structures does the pelvic floor separate? [3]

2.3 Which segments form the pelvic core? [3]

3 Exam-style questions

3.1 After a prolonged delivery (fictional), perineal numbness.

Name the compressed nerve and the bony landmark. Explain why the deficit is usually transient. State the test for S2–4 integrity. [7]

3.2 A third-degree tear is identified.

State what "third degree" includes (external sphincter). Explain why continence is at risk anatomically. Distinguish nerve injury from sphincter injury in management. [7]

Solutions

2.1

- Ischial spine.

2.2

- The pelvic viscera above from the perineum below.

2.3

- S2, S3, S4 ✓.

3.1

- Pudendal nerve compressed against the ischial spines by the fetal head.
- Neurapraxia from stretch recovers; the nerve is intact.
- Test: perineal sensation, anal squeeze, bulbocavernosus reflex.

3.2

- Third degree: tear through the external anal sphincter (± rectal mucosa = fourth).
- Continence is the sphincter's mechanical closure; a divided muscle cannot squeeze until repaired.
- Nerve injury (observe/recover) vs sphincter injury (surgical repair and protection of the wound).