



# **SNS COLLEGE OF PHARMACY & HEALTH SCIENCES**

## **PUZZLES ON**

### **HUMAN ANATOMY & PHYSIOLOGY I-D.PHARM**

✓ **Case 1: Muscle Weakness**

A 20-year-old athlete complains of muscle fatigue even after mild exercise. On investigation, ATP levels are very low.

- **Puzzle:** Which cell organelle might be defective?
- **Clue:** Organelles responsible for energy production.

✓ **Case 2: Drug Toxicity**

A patient taking high doses of medication develops liver toxicity. Doctors test for enzyme activity in microsomes.

- **Puzzle:** Why test microsomes in this case?

✓ **Case 3: Lysosomal Storage Disorder**

A child has swollen organs and inability to break down certain lipids.

- **Puzzle:** Which organelle is likely defective?

✓ **Case 4: Transport Trouble**

A patient's nerve cells show defective protein transport and accumulation in the cytoplasm.

- **Puzzle:** Which organelle is likely malfunctioning?

✓ **Case 5: The Puzzling Pain**

- **Puzzle:** A 35-year-old man presents to the clinic with persistent pain in his lower back. He points to an area on his **posterior** side, away from his spine and closer to the outer edge of his back. Using anatomical terms, where exactly is his pain?