# **Gastrointestinal: Case 4**

### **Prompt**

These images are from a 45-year-old man with pneumaturia and passage of urine rectally. History of diverticulitis. Please generate a report for these images.









## Reference answer

On non-contrast image, a DJ stent is inserted on the right side in appropriate position. Several stones are seen in the lower part of the right renal lodge. After contrast media injection via a Foley catheter, the urinary bladder is visualized, accompanied by bilateral vesicoureteral reflux. In addition, evidence of fistulous formation is observed between the posterior aspect of the urinary bladder and the adjacent rectosigmoid junction.

## **GPT-4V**

## **Radiological Report:**

Patient: 45-year-old male

Clinical Information: Pneumaturia, passage of urine rectally, history of diverticulitis.

**Procedure:** Plain radiographs of the abdomen

Findings:

Pelvis and Lumbar Spine: The lumbar vertebral bodies and intervertebral disc spaces appear normal in alignment and height. No obvious bony erosions or destructive lesions identified in the visible lumbar vertebrae.

Abdominal Soft Tissues: There are multiple outpouchings of the colon walls consistent with diverticula,

predominantly seen on the left side. This is in keeping with the clinical history of diverticulitis.

Gas Pattern: There appears to be gas within the urinary bladder, evidenced by radiolucent (dark) areas within the region of the bladder. This is consistent with pneumaturia.

Urinary Bladder: A contrast-filled structure, likely representing a Foley's catheter or similar device, is seen within the bladder. There is a suggestion of a fistulous tract or communication between the rectum and urinary bladder, which could explain the clinical symptom of the passage of urine rectally. However, this would be better evaluated on a CT or MRI study.

#### Impression:

Findings consistent with a history of diverticulitis with multiple diverticula noted. Gas within the urinary bladder suggesting pneumaturia. Suggestion of a fistulous communication between the rectum and urinary bladder, though further cross-sectional imaging would be recommended for a definitive diagnosis.

### **Prompt**

Please generate a report for these images.

## **GPT-4V**

### Radiological Report

**Study Type:** Pelvic and Lumbar Spine X-rays

#### Findings Pelvic X-ray:

Hip Joints: Both hip joints appear intact without any evidence of fracture or dislocation.

Pelvic Bones: The pelvic bones, including the ilium, ischium, and pubis, are well-preserved without any signs of fractures or significant bony abnormalities.

Sacroiliac Joints: The sacroiliac joints on both sides appear to be maintained without any obvious signs of degeneration or ankylosis.

Foreign Object: There appears to be a radiopaque foreign object in the region of the right hip. This could possibly be a medical device or implant.

#### **Lumbar Spine X-ray:**

Alignment: The alignment of the lumbar vertebrae is within normal limits.

Vertebral Bodies: No evidence of compression fractures or significant bony abnormalities in the visualized lumbar vertebral bodies.

Disc Spaces: Intervertebral disc spaces are maintained.

Facet Joints: No obvious signs of degeneration or ankylosis in the visualized facet joints.

Soft Tissues: Normal soft tissue shadows are seen without any apparent masses or calcifications.

#### Impression:

Normal alignment and bony structures of the lumbar spine and pelvis.

Radiopaque foreign object noted in the region of the right hip, which could represent a medical device or implant.

No evidence of fractures, dislocations, or significant degenerative changes.