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Corresponding Author

Dr. Uddalok Das
Doctors Quarter G-4, North
Bengal Medical College and
Hospital, Sushruta Nagar, Pin –
734012, Dist – Darjeeling,
West Bengal, India
E-mail: rikdas05@gmail.com

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Radiology Quiz

Uddalok Das

Assistant Professor, Department of Radiodiagnosis, North Bengal Medical College Darjeeling

QUESTION 1

An elderly female presented with limping gait since childhood.



- Describe the findings?
- What are the differential diagnoses?
- Apart from the hip pathology, what prominent incidental skeletal findings are noted in the visualized portions of the axial skeleton?
- What is the management?

- Chronic Recurrent Multifocal Osteomyelitis (CRMO). The findings include complete obliteration of the bilateral femoroacetabular joint spaces, severe architectural deformity with flattening and destruction of both femoral heads, and marked subchondral sclerosis.
- The top differential diagnoses include stage 4 avascular necrosis of the femoral heads with secondary osteoarthritis, advanced primary bilateral osteoarthritis, sequelae of septic arthritis, and end-stage inflammatory arthropathy (such as rheumatoid arthritis) that has progressed to secondary degenerative joint disease.
- The visualized lower lumbar spine exhibits severe degenerative spondylotic changes.
- Bilateral Total Hip Arthroplasty (THA).

ANSWERS



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QUESTION 2



- What are the findings demonstrated in this plain abdominal radiograph?
- Based on these characteristic radiographic features, what is the primary diagnosis?
- Radiologically, how can you differentiate the dilated loops seen in this image from large bowel dilation?
- What are the most common etiologies for this condition in an adult patient?

ANSWERS 2

- The radiograph demonstrates multiple, markedly dilated bowel loops occupying the central abdomen. The valvulae conniventes are clearly visible traversing the entire transverse diameter of the dilated loops, creating a characteristic "stack of coins" or "step-ladder" appearance.
- Small Bowel Obstruction
- In this image, the prominent valvulae completely cross the width of the bowel lumen, which is the defining feature of the small intestine. Additionally, the loops are centrally located. Conversely, large bowel typically occupies a peripheral position and shows the presence of haustra—thickened bands that only partially cross the bowel lumen.
- In adults, the most common causes of mechanical small bowel obstruction are intra-abdominal adhesions (typically from previous abdominal surgeries)



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