

INDIVIDUAL CASE STUDY (CASE CODE: 3)

DIAGNOSTIC SERVICES COMMITTEE

PARTICIPANT GUIDELINES

- Event will be presented to you through your reading of CURIS Skills, CURIS Knowledge and Case Details
- Each case study must be completed individually and should take approximately 1 hour
- You should take approximately 10 minutes to review this information and 20 mins to conduct external research to help prepare your response
- You should then take approximately 20 minutes to write your response and allot 10 minutes to edit your response and submit your work
- Please also include a citations page to indicate which external sources were used
- All submissions will be made through the CurisConnect website
- You will be evaluated on how well you demonstrate the CURIS Skills and meet the CURIS Knowledge criteria. The last page in your case study package consists of an Evaluation Form whereby the evaluator will allot points for the completion of the case study.
- The points allotted will be based on the depth and detail of your explanation in your response since there are no defined right or wrong answers, but rather we want to see your thinking, research, knowledge and understanding on the situation at hand.
- The amount of points earned will correspond to the amount of volunteer minutes or hours you will earn. The threshold and range for this grading scheme can also be found at the bottom of the Evaluation Form.
- Participants who successfully complete the case study will receive a Certificate of Participation

CURIS SKILLS

- Critical Thinking – Reason effectively and use systems thinking.
- Communication – Communicate clearly.
- Creativity and Innovation – Show evidence of creativity.
- Healthcare Oriented Mindset - Utilizes proper terminology and demonstrates foundational educational understanding in discipline.

CURIS KNOWLEDGE

- Analyze MRI findings and their deeper implications.
- Evaluate treatment options including conservative measures and interventional procedures.
- Determine an accurate diagnosis based on a patient's clinical presentation and MRI results.

CASE DETAILS

Radiology Innovations Inc. (RII) is a cutting-edge medical imaging company dedicated to pushing the boundaries of radiological technology and services. Established in 2010, RII has quickly become a leader in the field, providing advanced imaging solutions to healthcare facilities worldwide. With a focus on research and development, RII continually seeks to improve diagnostic accuracy and patient care through innovation.

RII has recently encountered a challenging case involving a 60-year-old male patient, Mr. John Carter. Mr. Carter presented with a history of chronic back pain, radiating down his left leg, accompanied by numbness and weakness. His symptoms have progressively worsened over the past six months, significantly impacting his quality of life. The patient's demographic aligns with middle-aged individuals prone to musculoskeletal issues.

Upon referral to RII, Mr. Carter underwent magnetic resonance imaging (MRI) of the lumbar spine. The imaging revealed disc degeneration at multiple levels, along with evidence of nerve compression at the L4-L5 level. Additionally, there were signs of facet joint hypertrophy contributing to spinal stenosis. The nature of these findings suggests a complex interplay of degenerative changes affecting the lumbar spine, requiring expert radiological interpretation for accurate diagnosis and treatment planning.

You are expected to analyze the MRI findings comprehensively and formulate a differential diagnosis based on the observed degenerative changes and clinical symptoms presented by Mr. Carter. You should consider various musculoskeletal conditions affecting the lumbar spine, such as disc herniation, spinal stenosis, and facet joint arthropathy. Furthermore, you should propose appropriate treatment options tailored to address Mr. Carter's specific condition, taking into account his symptoms, medical history, and overall health status.

Please also address the following questions in your response:

- What treatment modalities would you recommend to manage Mr. Carter's symptoms and improve his quality of life?
- What emerging pharmaceutical therapies or minimally invasive procedures show promise in mitigating pain and slowing disease progression for patients like Mr. Carter?

EVALUATION FORM

PARTICIPANT: _____

EVALUATOR: _____

Did the participant:		Below expectations	Meets expectations	Exceeds expectations	Judged score
CURIS KNOWLEDGE					
1	Analyze MRI findings and their deeper implications.	2	4	6	
2	Evaluate treatment options including conservative measures and interventional procedures.	2	4	6	
3	Determine an accurate diagnosis based on a patient's clinical presentation and MRI results.	2	4	6	
CURIS SKILLS					
4	Critical Thinking & Problem-Solving	1	2	3	
5	Communication, Terminology & Professionalism	1	2	3	
6	Creativity & Innovation	1	2	3	
7	Healthcare Oriented Mindset	1	2	3	
TOTAL SCORE					

Total Score	Volunteer Minutes
25-30 points	1 hour
20-24 points	45 mins
15-19 points	30 mins
10-14 points	15 mins