

MEDLEY Clinical Decision Report

Case tmp330njue2: Medical Case from tmp330njue2.txt

Case Overview

Presentation:	28-year-old woman, recent immigrant from Somalia, presents to emergency department with recurrent episodes of severe abdominal pain, fever spikes to 39.5°C, and arthritis affecting knees and ankles. Episodes last 2-3 days and resolve spontaneously. She reports similar episodes in family members "...
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Diagnostic Landscape

PRIMARY DIAGNOSIS	Reactive Arthritis	17% Agreement
Minority Opinion	Reactive Arthritis	By Llama 3.2 3B, Llama 3.2 3B
Minority Opinion	Inflammatory Bowel Disease	By Llama 3.2 3B

Management Strategies

Critical Decision Points

- Geographic variation in diagnoses - consider regional disease patterns

Models: 8	Responded: 6	Unique Diagnoses: 2	Consensus: Strong
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Model Diversity & Bias Analysis

Model Response Patterns

Model	Origin	Release	Primary Diagnosis	Confidence
Mistral 7B	France	2023-09	Unknown	Varied
Gemma 2 9B	USA	2024-06	No diagnosis	Varied
Llama 3.2 3B	USA	2024-09	Inflammatory Bowel Disease	Varied
Qwen 2.5 32B	China	2024-11	Unknown	Varied
Gemini 2.0 Flash	USA	2024-12	Unknown	Varied
DeepSeek V3	China	2024-03	Unknown	Varied

Identified Bias Sources

Geographic	France vs USA	Divergent diagnoses based on regional training
Geographic	USA vs China	Divergent diagnoses based on regional training
Temporal	Release dates vary	Model release dates span from 2023-09 to 2024-12, potentially affecting knowledge
Training Data	Multilingual web data	Broad knowledge but variable quality
Training Data	Curated datasets	Standard medical training data

Unique Model Perspectives

Model	Unique Diagnosis	Reasoning
Llama 3.2 3B	Inflammatory Bowel Disease	ndings" }, { "name": , "confidence": 0.1, "icd_code": "K50-K59", "reasoning":...

Diagnostic Categories

- **Autoimmune/Inflammatory:** Inflammatory Bowel Disease, Reactive Arthritis

Detailed Model Responses

Mistral 7B (France)

1. Unknown
Recurrent abdominal pain and fever could be indicative of IBD. However, the absence of diarrhea and weight loss in this case reduces its likelihood.
2. Unknown
Fever and arthritis are symptoms of Septic Arthritis, but the response to standard analgesics and the peritoneal signs suggest an inflammatory rather than infectious process.
3. Unknown
Although the patient's age is within the range for Rheumatoid Arthritis, the recurrent abdominal pain and fever are not typical symptoms, and the absence of morning stiffness and symmetrical joint ...

Llama 3.2 3B (USA)

1. Inflammatory Bowel Disease
ndings" }, { "name": , "confidence": 0.1, "icd_code": "K50-K59", "reasoning": "Rare in young adults, but possible consideration based
2. Reactive Arthritis
primary_diagnosis": { "name": , "confidence": 0.8, "icd_code": "M35.9", "reasoning": "Clinical presentation of recurrent episodes of severe abdominal pain, fever, art
3. reactive arthritis
primary_diagnosis": { "name": "Reactive Arthritis", "confidence": 0.8, "icd_code": "M35.9", "reasoning": "Clinical presentation of recurrent episodes of severe abdomina

Qwen 2.5 32B (China)

1. Unknown
Arthritis affecting knees and ankles and family history of similar episodes, but usually presents with back pain which is not mentioned here.
2. Unknown
Abdominal pain and fever can suggest an infectious etiology, but no specific infection source is evident from the history.
3. Unknown
Abdominal pain and fever can be associated with inflammatory bowel diseases, but arthritis affecting knees and ankles is less common.

Gemini 2.0 Flash (USA)

1. Unknown
While FMF is most likely given the ethnicity, other autoinflammatory syndromes can present with similar symptoms. Further genetic testing is needed to rule them out definitively.
2. Unknown
SLE can present with fever, arthritis, and abdominal pain. However, the recurrent, self-limiting nature of the episodes is less typical of SLE. Autoantibody testing is needed to rule this out.
3. Unknown
Given the patient's recent immigration from Somalia, infectious diseases common in that region should be considered, although the recurrent and self-limiting nature of the episodes makes infection ...

DeepSeek V3 (China)

1. Unknown
Peritoneal signs and abdominal pain could suggest appendicitis, but the recurrent nature and spontaneous resolution make this less likely.

2. Unknown Arthritis and fever could be seen in SLE, but the episodic nature and lack of other systemic symptoms make this less likely.
3. Unknown Abdominal pain and elevated inflammatory markers could suggest IBD, but the absence of chronic diarrhea or weight loss makes this less likely.