

MEDLEY Clinical Decision Report

Case tmp_8q0zdhp: Medical Case from tmp_8q0zdhp.txt

Case Overview

Presentation:	A 28-year-old male of Mediterranean descent presents with: - Recurrent episodes of fever lasting 1-3 days - Severe abdominal pain during episodes - Chest pain with breathing difficulties - Joint pain affecting knees and ankles - Family history: Father and paternal uncle have similar symptoms - Ep...
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Diagnostic Landscape

PRIMARY DIAGNOSIS	Understanding The Challenge**	20% Agreement
Minority Opinion	Understanding The Challenge	By Gemma 2 9B, Gemma 2 9B
Minority Opinion	Structured Vs. Unstructured	By Gemma 2 9B

Management Strategies

Critical Decision Points

- Low consensus indicates complex presentation - consider specialist consultation
- Multiple minority diagnoses suggest atypical presentation
- Geographic variation in diagnoses - consider regional disease patterns

Models: 8	Responded: 5	Unique Diagnoses: 4	Consensus: None
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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	Understanding the Challenge	Varied
Llama 3.2 3B	USA	2024-09	Unknown	Varied
Qwen 2.5 32B	China	2024-11	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 2024-11, 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
Gemma 2 9B	Structured Vs. Unstructured	Medical records contain both structured data (like dates, lab results) and u...
Gemma 2 9B	Variability	Different doctors may use different phrasing to describe the same condition.
Gemma 2 9B	Translation Strategies	No reasoning

Diagnostic Categories

- **Other:** Understanding The Challenge**, Structured Vs. Unstructured, Variability

Detailed Model Responses

Mistral 7B (France)

1. Unknown
Recurrent abdominal pain and inflammatory markers elevation, but lack of typical IBD symptoms like diarrhea and weight loss.
2. Unknown
Recurrent joint pain affecting knees and ankles, but lack of typical RA symptoms like morning stiffness and rheumatoid nodules.
3. Unknown
Possible chest pain and joint pain, but lack of typical SLE symptoms like rash, photosensitivity, and serositis.

Gemma 2 9B (USA)

1. Understanding the Challenge
Medical data is inherently complex:
2. Understanding the Challenge
Medical data is inherently complex:
3. Structured vs. Unstructured
Medical records contain both structured data (like dates, lab results) and unstructured text (like doctor's notes).

Llama 3.2 3B (USA)

1. Unknown
Similar symptoms of joint pain and stiffness, but without the characteristic fever and abdominal pain
2. Unknown
Similar symptoms of joint pain and skin lesions, but without the characteristic fever
3. Unknown
Similar symptoms of abdominal pain and weight loss, but without the characteristic fever and joint pain

Qwen 2.5 32B (China)

1. Unknown
Given the patient's Mediterranean descent, recurrent episodes of fever with abdominal pain, pleurisy, and arthritis, and family history of similar symptoms, FMF is a strong consideration.
2. Unknown
The patient's chest pain with breathing difficulties could be related to vasculitis affecting large arteries, such as Takayasu Arteritis, which also presents with fever and joint pain.
3. Unknown
Recurrent episodes of fever and pain in joints, especially the knees and ankles, along with the possibility of chest pain due to inflammation, may indicate Behcet's Disease, but this diagnosis typi...

DeepSeek V3 (China)

1. Unknown
Recurrent fevers and periodic symptoms are consistent with PFAPA, but the absence of aphthous stomatitis and pharyngitis makes this less likely.
2. Unknown
Episodic fever and joint pain are seen in systemic JIA, but the family history and Mediterranean descent make FMF more likely.
3. Unknown
Other hereditary periodic fever syndromes could present similarly, but FMF is the most common and fits the clinical picture best.

