

MEDLEY Clinical Decision Report

Case tmpynyzar3g: Medical Case from tmpynyzar3g.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	Familial Mediterranean Fever	20% Agreement
Minority Opinion	Familial Mediterranean Fever	By Mistral 7B, Mistral 7B
Minority Opinion	Inflammatory Bowel Disease	By Mistral 7B

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: 6	Consensus: None
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Model Diversity & Bias Analysis

Model Response Patterns

Model	Origin	Release	Primary Diagnosis	Confidence
Mistral 7B	France	2023-09	Familial Mediterranean Feve...	Varied
Gemma 2 9B	USA	2024-06	Infection	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	France vs China	Divergent diagnoses based on regional training
Temporal	Release dates vary	Model release dates span from 2023-09 to 2024-11, potentially affecting knowle
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
Mistral 7B	Inflammatory Bowel Disease	ition." }, { "name": , "confidence": 0.1, "icd_code": "K50.x", "reasoning": "...
Mistral 7B	Systemic Lupus Erythematosus	tial_diagnoses": [{ "name": , "confidence": 0.2, "icd_code": "M32.0", "leaso...
Gemma 2 9B	Infection	", "icd_10": "B27" }], "tests": [{ "test_name": "Influenza Rapid Antigen Te...
Gemma 2 9B	Failure	"], "follow_up": { "timing": "In 3-5 days if symptoms persist or worsen" "c...
Gemma 2 9B	Fever	```json { "patient_name": "John Doe", "age": 35, "gender": "Male", "chief_com...

Diagnostic Categories

- **Autoimmune/Inflammatory:** Inflammatory Bowel Disease, Systemic Lupus Erythematosus
- **Infectious:** Familial Mediterranean Fever, Infection, Fever
- **Other:** Failure

Detailed Model Responses

Mistral 7B (France)

1. Familial Mediterranean Fever (FMF) `primary_diagnosis": { "name": , "confidence": 0.8, "icd_code": "M39.0", "reasoning": "Recurrent fever, abdominal pain, chest pain, joint pain, family history, and lab`
2. FMF `name": "Familial Mediterranean Fever ()", "confidence": 0.8, "icd_code": "M39.0", "reasoning": "Recurrent fever, abdominal pain, chest pain, joint pain, family history, and lab`
3. Inflammatory Bowel Disease (IBD) `ition." }, { "name": , "confidence": 0.1, "icd_code": "K50.x", "reasoning": "Recurrent abdominal pain could be consistent with IBD. Ho`

Gemma 2 9B (USA)

1. Infection `", "icd_10": "B27" }] , "tests": [{ "test_name": "Influenza Rapid Antigen Test", "priority": "high", "rationale": "To confirm or rule out influenza infection" }, { "test_name": "Complete Blood Cou...`
2. Failure `"] , "follow_up": { "timing": "In 3-5 days if symptoms persist or worsen", "conditions": "Failure to improve, worsening symptoms, difficulty breathing" }, "red_flags": ["Difficulty breathing", "Ch...`
3. Fever ````json { "patient_name": "John Doe", "age": 35, "gender": "Male", "chief_complaint": "Fever, headache, muscle aches", "duration_of_symptoms": "3 days", "relevant_medical_history": "None", "medicat...`

Llama 3.2 3B (USA)

1. Unknown

The patient's joint pain and elevated inflammatory markers are also consistent with ankylosing spondylitis, although the lack of spine involvement makes this less likely
2. Unknown

The patient's joint pain and family history of similar symptoms are also consistent with psoriatic arthritis, although the lack of skin lesions makes this less likely
3. Unknown

The patient's abdominal pain and elevated inflammatory markers during attacks are also consistent with enteropathic arthritis, although the lack of small bowel involvement makes this less likely

Qwen 2.5 32B (China)

1. Unknown

Chest pain with breathing difficulties could be due to involvement of the aorta and its branches, which is seen in Takayasu Arteritis.
2. Unknown

Recurrent episodes of fever and joint pain, although usually associated with oral and genital ulcers and eye inflammation, could be considered in differential diagnosis.
3. Unknown

Fever, chest pain, and joint pain could be indicative of sarcoidosis, although typical lung involvement symptoms are not mentioned.

DeepSeek V3 (China)

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| 1. | Unknown | Recurrent fevers and periodic symptoms are characteristic, but lack of aphthous stomatitis or pharyngitis makes this less likely. |
| 2. | Unknown | Can present with fever and joint pain, but the episodic nature and family history make SLE less likely. |
| 3. | Unknown | Can cause recurrent abdominal pain, but lack of angioedema or swelling makes this unlikely. |