

# MEDLEY Clinical Decision Report

Case tmpgpg3f1s4: Medical Case from tmpgpg3f1s4.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	17% 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: 6	Unique Diagnoses: 7	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	Appendicitis	Varied
Llama 3.2 3B	USA	2024-09	Unknown	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	France vs China	Divergent diagnoses based on regional training
Temporal	Release dates vary	Model release dates span from 2023-09 to 2024-12, 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	ikely." }, { "name": , "confidence": 0.2, "icd_code": "K50.XX", "reasoning": ...
Mistral 7B	Systemic Lupus Erythematosus	tial_diagnoses": [ { "name": , "confidence": 0.2, "icd_code": "M32.0", "reaso...
Mistral 7B	Rheumatoid Arthritis	bable." }, { "name": " (RA)", "confidence": 0.1, "icd_code": "M05.XX", "reaso...
Gemma 2 9B	Appendicitis	No reasoning
Gemma 2 9B	Gastroenteritis	No reasoning

## Diagnostic Categories

- **Autoimmune/Inflammatory:** Inflammatory Bowel Disease, Systemic Lupus Erythematosus, Rheumatoid Arthritis
- **Infectious:** Familial Mediterranean Fever

- **Other:** Appendicitis, Gastroenteritis, Constipation

# Detailed Model Responses

## Mistral 7B (France)

- |    |                                    |  |
|----|------------------------------------|--|
| 1. | Familial Mediterranean Fever (FMF) | primary_diagnosis": { "name": , "confidence": 0.8, "icd_code": "M39.0", "reasoning": "Recurrent episodes of fever, abdominal pain, chest pain, joint pain, and elevate           |
| 2. | FMF                                | name": "Familial Mediterranean Fever ()", "confidence": 0.8, "icd_code": "M39.0", "reasoning": "Recurrent episodes of fever, abdominal pain, chest pain, joint pain, and elevate |
| 3. | Inflammatory Bowel Disease (IBD)   | ikely." }, { "name": , "confidence": 0.2, "icd_code": "K50.XX", "reasoning": "Recurrent abdominal pain, fever, and elevated inflammato   |

## Gemma 2 9B (USA)

- |    |                 |                       |
|----|-----------------|-----------------------|
| 1. | Appendicitis    | No reasoning provided |
| 2. | Gastroenteritis | No reasoning provided |
| 3. | Constipation    | No reasoning provided |

## Llama 3.2 3B (USA)

- |    |         |   |
|----|---------|---|
| 1. | Unknown | The patient's presentation could also be consistent with undifferentiated arthritis, as the diagnosis is not yet specific enough to assign an ICD-10 code.                        |
| 2. | Unknown | The patient's joint pain and family history could suggest ankylosing spondylitis, but the lack of specific symptoms and radiographic evidence makes this a less likely diagnosis. |
| 3. | Unknown | The patient's episodes of fever and abdominal pain could also be consistent with gastroenteritis, but the duration and frequency of episodes suggest a more chronic condition.    |

## Qwen 2.5 32B (China)

- |    |         |   |
|----|---------|---|
| 1. | Unknown | Recurrent episodes of fever with elevated WBC and neutropenia can mimic PFAPA, though the abdominal and chest pain are less typical.  |
| 2. | Unknown | Recurrent fever with abdominal pain and arthritis in a person of Mediterranean descent, but FMF typically presents with peritonitis, chest pain is less common, and no pharyngitis or adenitis. |
| 3. | Unknown | Recurrent fever and chest pain can occur in Takayasu Arteritis, but it is less common in children and usually presents with other symptoms like fatigue and weight loss.                        |

## Gemini 2.0 Flash (USA)

- |    |         |  |
|----|---------|--|
| 1. | Unknown | Shares similar symptoms of recurrent fever, abdominal pain, and joint pain. However, FMF is more common in Mediterranean populations. Genetic testing is crucial to differentiate. |
|----|---------|--|

2. Unknown TRAPS presents with recurrent fever, abdominal pain, and arthritis, but episodes tend to last longer (several days to weeks) than in FMF. Family history also supports considering this diagnosis.
3. Unknown Can present with fever, joint pain, and elevated inflammatory markers. However, the specific pattern of symptoms and family history make FMF more likely. Usually presents earlier in childhood.

#### DeepSeek V3 (China)

1. Unknown Recurrent fever episodes and family history of similar symptoms could fit this diagnosis, but absence of aphthous ulcers and pharyngitis makes it less likely.
2. Unknown Episodic fever and joint pain are common in SJIA, but the absence of rash and the family history make FMF more likely.
3. Unknown Other hereditary periodic fever syndromes (e.g., TRAPS, MKD) could present similarly, but FMF is most common in Mediterranean populations.