

Medical Al Ensemble Clinical Decision Report

Generated: 2025-08-12 Case ID: Case_13 Title: Case_13 - Medical Analysis

07:35

Primary Diagnostic Consensus

| Diagnosis | ICD-10 | Agreement | Confidence | Status |
|-----------------|--------|-----------|------------|---------|
| Lupus Nephritis | M32.14 | 0.0% | Very Low | PRIMARY |

Alternative & Minority Diagnoses

| Diagnosis | ICD-10 | Support | Туре |
|--|--------|---------|----------------------|
| IgA Nephropathy | N02.8 | 25.9% | Alternative (20-29%) |
| Post-infectious Glomerulonephritis | N05.9 | 14.8% | Alternative (20-29%) |
| ANCA-Associated Vasculitis | M31.3 | 7.4% | Minority (<20%) |
| Rapidly Progressive Glomerulonephritis | N02.0 | 3.7% | Minority (<20%) |
| Membranoproliferative Glomerulonephritis | N05.5 | 3.7% | Minority (<20%) |
| Acute Pyelonephritis | N10 | 3.7% | Minority (<20%) |
| Interstitial Cystitis | N30.0 | 7.4% | Minority (<20%) |
| Chronic Kidney Disease | N18.3 | 3.7% | Minority (<20%) |
| Alport Syndrome | Q87.81 | 3.7% | Minority (<20%) |
| Acute Interstitial Nephritis | N17.0 | 7.4% | Minority (<20%) |
| Chronic Pyelonephritis | N11.9 | 7.4% | Minority (<20%) |
| Membranous Nephropathy | N02.3 | 3.7% | Minority (<20%) |

Analysis Overview

Models Queried: 22

Successful Responses: 22

Consensus Level: High

Total Estimated Cost: \$0.385

Critical Decision Points & Evidence Synthesis

Critical Decision Points

Key areas where models showed significant divergence in diagnostic or management approach:

Evidence Synthesis & Clinical Correlation

Symptom-Diagnosis Correlation Matrix

| Symptom/Finding | Lupus Nephri | lgA Nephropa | Post-infecti | ANCA-Associa |
|-----------------|--------------|--------------|--------------|--------------|
| Low Complement | +++ | +++ | +++ | +++ |
| Proteinuria And | +++ | +++ | +++ | +++ |
| Young Male With | + | + | + | ++ |
| Weight Gain Sug | +++ | +++ | +++ | +++ |
| Hypertension On | ++ | ++ | ++ | +++ |

Legend: +++ Strong association, ++ Moderate, + Weak, - Not typical

Diagnostic Decision Tree

| Step | Action | If Positive | If Negative |
|------|--------------------------|---------------------------------|--------------------------------|
| 1 | Initial Laboratory Tests | → Confirm suspicion | ightarrow Broaden differential |
| 2 | Imaging Studies | → Identify pathology | → Consider specialized tests |
| 3 | Specialized Testing | → Definitive diagnosis | → Empiric treatment |
| 4 | Treatment Trial | ightarrow Continue if effective | → Reconsider diagnosis |

Executive Summary

Case Description

Complex Urology Case Presentation

Patient Demographics

Age: 24 years old

Sex: Male

Ethnicity: Middle Eastern (Iranian heritage) Occupation: Graduate student in chemistry

Chief Complaint

"Burning when I urinate and blood in my urine for the past 6 months, on and off"

History of Present Illness

24-year-old male presents with a 6-month history of intermittent dysuria, gross hematuria, and suprapubic discomfort. Episodes occur every 2-3 weeks, last 3-5 days, then resolve completely. Patient reports no fever during episodes. Pain is described as "deep burning" both during and after urination. Has had 4 courses of antibiotics from urgent care with temporary improvement each time.

Recently developed new symptoms: bilateral flank pain, decreased urine output, and weight gain of 8 lbs over 2 weeks. Denies recent travel, new sexual partners, or illicit drug use. Reports family history of "kidney problems" in paternal uncle.

Past Medical History

- Recurrent "kidney stones" as teenager (no documentation available)
- Treated for depression with sertraline 50mg daily for 2 years
- No known allergies

Social History

- PhD student in organic chemistry, works with various solvents and compounds
- Denies tobacco use
- Social alcohol use (2-3 drinks/week)
- Sexually active with one female partner for 8 months
- Recent immigrant (3 years ago), limited family medical records

Physical Examination

- Vital Signs: BP 145/92, HR 88, Temp 37.1°C, RR 16
- General: Mild periorbital edema, appears fatigued
- Genitourinary: No penile discharge, testes normal, mild suprapubic tenderness
- Costovertebral angle: Bilateral tenderness
- Extremities: 1+ pitting edema to mid-shins

Laboratory Results

Urinalysis (during symptomatic episode)

- Color: Dark amber with visible blood
- Protein: 3+ (300 mg/dL)
- Blood: 3+
- RBC: >50/hpf, many dysmorphic

- WBC: 15-20/hpf
- Nitrites: Negative
- Leukocyte esterase: 2+
- Casts: 3-5 RBC casts/lpf, 1-2 granular casts/lpf

Urine Culture

- Day 1: Mixed flora <10,000 CFU/mL
- Day 3: No growth

Serum Chemistry

- Creatinine: 2.1 mg/dL (baseline unknown)
- BUN: 45 mg/dL
- eGFR: 42 mL/min/1.73m²
- Sodium: 138 mEq/L
- Potassium: 4.8 mEq/L
- Chloride: 104 mEq/L

Additional Labs

- CBC: WBC 8,200, Hgb 11.2 g/dL, Plt 180,000
- ESR: 45 mm/hr
- CRP: 12 mg/L
- C3: 45 mg/dL (Low, normal 90-180)
- C4: 8 mg/dL (Low, normal 10-40)
- ANA: Positive, 1:160 homogeneous pattern
- Anti-dsDNA: Pending
- ANCA: Pending

Imaging

- Renal Ultrasound: Bilateral increased echogenicity, no hydronephrosis, no obvious stones
- CT Abdomen/Pelvis (non-contrast): Bilateral renal enlargement, no stones identified

Key Clinical Findings

- Elevated inflammatory markers (CRP, ESR)
- · Positive family history of similar episodes

Primary Recommendations

- Consider Lupus Nephritis among differential diagnoses
- Obtain renal biopsy for histologic classification
- Assess disease activity and severity
- Evaluate for extrarenal lupus manifestations
- Obtain Renal biopsy for diagnostic confirmation

Primary Diagnosis Clinical Summaries

■ Key Clinical Findings

| Finding | Supporting Evidence | Clinical Reasoning |
|---|-----------------------|--------------------------|
| Dysmorphic RBCs and RBC casts indicating glomerular disease | Clinical presentation | Key diagnostic indicator |
| Low complement C3 and C4 levels | Clinical presentation | Key diagnostic indicator |
| Positive ANA suggesting autoimmune etiology | Clinical presentation | Key diagnostic indicator |
| Proteinuria and hematuria | Clinical presentation | Key diagnostic indicator |
| Bilateral flank pain with decreased urine output | Clinical presentation | Key diagnostic indicator |

■ Recommended Tests

| Test Name | Туре | Priority | Rationale |
|----------------------------|------------|----------|-------------------------|
| Renal biopsy | Laboratory | Urgent | Diagnostic confirmation |
| Anti-dsDNA antibody | Laboratory | Urgent | Diagnostic confirmation |
| 24-hour urine protein | Laboratory | Urgent | Diagnostic confirmation |
| Complement levels (C3, C4) | Laboratory | Urgent | Diagnostic confirmation |
| Complete metabolic panel | Laboratory | Urgent | Diagnostic confirmation |

■ Immediate Management

| Intervention | Category | Urgency | Clinical Reasoning |
|---|----------|-----------|-----------------------|
| Obtain renal biopsy for histologic classification | Medical | Immediate | Critical intervention |
| Assess disease activity and severity | Medical | Immediate | Critical intervention |
| Evaluate for extrarenal lupus manifestations | Medical | Immediate | Critical intervention |
| Monitor blood pressure and fluid status | Medical | Immediate | Critical intervention |

■ Medications

| Medication | Dosage | Route/Frequency | Indication |
|-----------------------|-------------|--------------------|---|
| Prednisone | 1 mg/kg/day | oral / daily | Initial immunosuppression for lupus nephritis |
| Mycophenolate mofetil | 1-1.5 g | oral / twice daily | Induction and maintenance therapy for lupus nephritis |
| ACE inhibitor | varies | oral / daily | Renoprotection and blood pressure control |

Diagnostic Landscape Analysis

Detailed Diagnostic Analysis

The ensemble analysis identified **Lupus Nephritis** as the primary diagnosis with 0.0% consensus among 7 models.

Detailed Alternative Analysis

| Diagnosis | Support | Key Evidence | Clinical Significance |
|--|---------|--------------|-----------------------|
| IgA Nephropathy | 25.9% | 7 models | Less likely |
| Post-infectious Glomerulonephritis | 14.8% | 4 models | Less likely |
| ANCA-Associated Vasculitis | 7.4% | 2 models | Unlikely |
| Rapidly Progressive Glomerulonephritis | 3.7% | 1 models | Unlikely |
| Membranoproliferative Glomerulonephritis | 3.7% | 1 models | Unlikely |
| Acute Pyelonephritis | 3.7% | 1 models | Unlikely |
| Interstitial Cystitis | 7.4% | 2 models | Unlikely |
| Chronic Kidney Disease | 3.7% | 1 models | Unlikely |

Minority Opinions

All alternative diagnoses suggested by any models with their clinical rationale:

• ANCA-Associated Vasculitis (ICD-10: Unknown) - 7.4% agreement (2 models)

Supporting Models: Model 14, Model 3

• Rapidly Progressive Glomerulonephritis (ICD-10: Unknown) - 3.7% agreement (1 models)

Supporting Models: Model 13

• Membranoproliferative Glomerulonephritis (ICD-10: Unknown) - 3.7% agreement (1 models)

Supporting Models: Model 11

• Acute Pyelonephritis (ICD-10: Unknown) - 3.7% agreement (1 models)

Supporting Models: Model 4

• Interstitial Cystitis (ICD-10: Unknown) - 7.4% agreement (2 models)

Supporting Models: Model 4, Model 22

• Chronic Kidney Disease (ICD-10: Unknown) - 3.7% agreement (1 models)

Supporting Models: Model 22

• Alport Syndrome (ICD-10: Unknown) - 3.7% agreement (1 models)

Supporting Models: Model 16

Acute Interstitial Nephritis (ICD-10: Unknown) - 7.4% agreement (2 models)

Supporting Models: Model 15, Model 18

• Chronic Pyelonephritis (ICD-10: Unknown) - 7.4% agreement (2 models)

Supporting Models: Model 9, Model 18

• Membranous Nephropathy (ICD-10: Unknown) - 3.7% agreement (1 models)

Supporting Models: Model 9

Additional Diagnoses Considered:

- IgA Nephropathy (ICD-10: N02.8) 31.8% (7 models)
- Post-infectious Glomerulonephritis (ICD-10: N05.9) 18.2% (4 models)

Management Strategies & Clinical Pathways

Immediate Actions Required

| Priority | Action | Rationale | Consensus |
|----------|---|---------------------|-----------|
| 1 | Obtain renal biopsy for histologic classification | Clinical indication | 50% |
| 2 | Assess disease activity and severity | Clinical indication | 50% |
| 3 | Evaluate for extrarenal lupus manifestations | Clinical indication | 50% |
| 4 | Monitor blood pressure and fluid status | Clinical indication | 50% |

Recommended Diagnostic Tests

| Test | Purpose | Priority | Timing |
|----------------------------|-------------------------|----------|--------------|
| Renal biopsy | Diagnostic confirmation | Routine | As indicated |
| Anti-dsDNA antibody | Diagnostic confirmation | Routine | As indicated |
| 24-hour urine protein | Diagnostic confirmation | Routine | As indicated |
| Complement levels (C3, C4) | Diagnostic confirmation | Routine | As indicated |
| Complete metabolic panel | Diagnostic confirmation | Routine | As indicated |
| ANCA panel | Diagnostic confirmation | Routine | As indicated |

Treatment Recommendations

Treatment recommendations pending diagnostic confirmation.

Model Diversity & Bias Analysis

Model Response Overview & Cost Analysis

| Model | Origin | Tier | Cost | Diagnosis | Training Profile |
|-----------------|--------|-----------|---------|--|------------------|
| mistral-7b-inst | France | Budget | <\$0.01 | Renal Infection (Pyelonephritis) | General |
| grok-4 | USA | Premium | \$0.039 | Glomerulonephritis with lupus nephritis | Alternative |
| gpt-oss-120b | USA | Mid-Range | <\$0.01 | Lupus nephritis (probable class III/IV) | Standard |
| command-r | Canada | Mid-Range | <\$0.01 | Acute Pyelonephritis | Standard |
| deepseek-chat | China | Budget | <\$0.01 | Lupus Nephritis | Regional |
| gemini-2.5-pro | USA | Premium | \$0.036 | Not specified | General |
| deepseek-r1 | China | Budget | <\$0.01 | Lupus Nephritis | Regional |
| sonar-deep-rese | USA | Premium | \$0.017 | Lupus Nephritis | Standard |
| jamba-large-1.7 | Israel | Premium | \$0.017 | Lupus Nephritis | Standard |
| gemini-2.5-flas | USA | Budget | <\$0.01 | Lupus Nephritis | General |
| mistral-large-2 | France | Premium | \$0.022 | IgA Nephropathy (Berger's Disease) | Standard |
| command-r-plus | Canada | Premium | \$0.028 | Glomerulonephritis | Standard |
| wizardlm-2-8x22 | USA | Mid-Range | <\$0.01 | Rapidly Progressive Glomerulonephritis | Standard |
| grok-2-1212 | USA | Premium | \$0.018 | Lupus Nephritis | Standard |
| gemma-2-9b-it | USA | Budget | <\$0.01 | Systemic Lupus Nephritis | Standard |
| gpt-4o | USA | Premium | \$0.028 | IgA Nephropathy | Comprehensive |
| gemini-2.5-flas | USA | Budget | <\$0.01 | Glomerulonephritis, likely related to autoimmune disease (e.g., Lupus Nephritis) | General |
| llama-3.2-3b-in | USA | Budget | <\$0.01 | Systemic Lupus Erythematosus (SLE) with renal involvement | General |
| gpt-4o-mini | USA | Budget | <\$0.01 | Glomerulonephritis | General |
| qwen-2.5-coder- | China | Mid-Range | <\$0.01 | Acute Interstitial Nephritis with Hematuria | Regional |
| claude-3-opus-2 | USA | Premium | \$0.158 | Lupus nephritis | Comprehensive |
| lfm-40b | USA | Mid-Range | <\$0.01 | Interstitial cystitis | Standard |

^{**}Total Estimated Cost: \$0.385**

Understanding Training Profiles

Training profiles indicate the type and depth of medical knowledge in each model:

Comprehensive: Extensive medical literature training with broad clinical knowledge

Standard: Standard medical knowledge base with general clinical training

Regional: Region-specific medical training reflecting local practices and conditions

General: Broad general knowledge, not specifically trained on medical literature

Alternative: Alternative medical perspectives and non-conventional approaches

Al Model Bias Analysis

Al model bias analysis is generated during orchestration (Step 2). This comprehensive analysis examines cultural, geographic, and training data biases across the Al models used.

Detailed Model Responses

Complete diagnostic assessments from each model:

1. mistral-7b-inst (France, Released: 2023-09-27)

Primary Diagnosis: Renal Infection (Pyelonephritis) (ICD-10: N10.90) - Confidence: 0.8 **Differential Diagnoses:**

- Renal Cell Carcinoma (ICD: C64.9) 0.2
- Urolithiasis (Kidney Stones) (ICD: N13.9) 0.15
- Glomerulonephritis (ICD: B80.9) 0.1

Key Clinical Findings:

- Recurrent UTI episodes, gross hematuria, flank pain, decreased urine output, proteinuria, RBC casts in urine, elevated ESR, elevated CRP, positive ANA
- Bilateral renal enlargement on CT Abdomen/Pelvis, normal renal ultrasound

2. grok-4 (USA, Released: 2024-12-26)

Primary Diagnosis: Glomerulonephritis with lupus nephritis (ICD-10: M32.14) - Confidence: 0.8 **Differential Diagnoses:**

- Membranoproliferative glomerulonephritis (ICD: N05.5) 0.6
- IgA nephropathy (ICD: N02.8) 0.5
- ANCA-associated vasculitis (ICD: M31.30) 0.4

Key Clinical Findings:

- Intermittent dysuria and gross hematuria with dysmorphic RBCs and RBC casts on urinalysis
- Acute kidney injury with creatinine 2.1 mg/dL and eGFR 42 mL/min/1.73m²
- Hypocomplementemia with low C3 (45 mg/dL) and C4 (8 mg/dL)
- Positive ANA (1:160 homogeneous pattern)

3. gpt-oss-120b (USA, Released: 2025-08-05)

4. command-r (Canada, Released: 2024-03-11)

Primary Diagnosis: Acute Pyelonephritis (ICD-10: N10) - Confidence: 0.75 **Differential Diagnoses:**

- Interstitial Cystitis (ICD: N30.9) 0.6
- Bladder Cancer (ICD: C67) 0.4

• Renal■Abcess (ICD: N14.9) - 0.3

Key Clinical Findings:

- Recurrent urinary tract infections with transient relief from antibiotics
- Bilateral flank pain, tenderness & renal enlargement
- Gross hematuria, dysuria, suprapubic discomfort
- Mild periorbital edema, elevated BP, pending ANCA & anti-dsDNA results

5. deepseek-chat (China, Released: 2024-12-20)

Primary Diagnosis: Lupus Nephritis (ICD-10: M32.14) - Confidence: 0.9 **Differential Diagnoses:**

- IgA Nephropathy (ICD: N02.8) 0.7
- Post-Infectious Glomerulonephritis (ICD: N00.9) 0.5
- Chronic Kidney Disease (ICD: N18.9) 0.6

Key Clinical Findings:

- Intermittent dysuria and hematuria
- Bilateral flank pain and decreased urine output
- Elevated creatinine and BUN
- Low C3 and C4 levels
- 6. gemini-2.5-pro (USA, Released: 2024-12-19)
- 7. deepseek-r1 (China, Released: 2025-01-20)
- 8. sonar-deep-rese (USA, Released: 2025-03-07)
- 9. jamba-large-1.7 (Israel, Released: 2025-07-01)

Primary Diagnosis: Lupus Nephritis (ICD-10: N02.2) - Confidence: 0.8 **Differential Diagnoses:**

- IgA Nephropathy (ICD: N02.0) 0.6
- Membranous Nephropathy (ICD: N02.3) 0.4
- Chronic Pyelonephritis (ICD: N11.9) 0.3

Key Clinical Findings:

• Bilateral renal enlargement

- Dysmorphic RBCs in urinalysis
- Low C3 and C4
- Positive ANA

10. gemini-2.5-flas (USA, Released: 2024-12-19)

Primary Diagnosis: Lupus Nephritis (ICD-10: N04.9) - Confidence: 0.9

Differential Diagnoses:

- IgA Nephropathy (ICD: N02.2) 0.6
- Post-infectious Glomerulonephritis (ICD: N03.8) 0.4
- Recurrent Urinary Tract Infection with Secondary Glomerulonephritis (ICD: N08.8) 0.3

Key Clinical Findings:

- Intermittent dysuria and gross hematuria for 6 months
- Bilateral flank pain, decreased urine output, weight gain, periorbital edema, pitting edema
- Hypertension (BP 145/92)
- Elevated BUN and Creatinine with decreased eGFR

11. mistral-large-2 (France, Released: 2024-11-01)

Primary Diagnosis: IgA Nephropathy (Berger's Disease) (ICD-10: N08.0) - Confidence: 0.85 **Differential Diagnoses:**

- Lupus Nephritis (ICD: M32.14) 0.7
- Post-infectious Glomerulonephritis (ICD: N05.9) 0.6
- Membranoproliferative Glomerulonephritis (ICD: N01.7) 0.55

Key Clinical Findings:

- Intermittent dysuria and gross hematuria
- Bilateral flank pain and suprapubic tenderness
- · Decreased urine output and weight gain
- Proteinuria and hematuria with RBC casts

12. command-r-plus (Canada, Released: 2024-04-04)

Primary Diagnosis: Glomerulonephritis (ICD-10: N03.9) - Confidence: 0.7

Differential Diagnoses:

- Interstitial Nephritis (ICD: N16.1) 0.6
- Nephrolithiasis (Kidney Stones) (ICD: N20.9) 0.5
- Urinary Tract Infection (UTI) (ICD: N39.0) 0.4

Key Clinical Findings:

- Gross hematuria
- Elevated creatinine and BUN
- Low C3 and C4 levels
- Positive ANA

13. wizardIm-2-8x22 (USA, Released: 2024-04-15)

Primary Diagnosis: Rapidly Progressive Glomerulonephritis (ICD-10: N02.0) - Confidence: 0.7 **Differential Diagnoses:**

- IgA Nephropathy (ICD: N03.2) 0.5Lupus Nephritis (ICD: N05.1) 0.6
- Post-infectious Glomerulonephritis (ICD: N05.9) 0.4

Key Clinical Findings:

- Intermittent dysuria, gross hematuria, and suprapubic discomfort for 6 months
- New onset bilateral flank pain, decreased urine output, and weight gain
- Proteinuria (3+) and hematuria with dysmorphic RBCs and RBC casts on urinalysis
- Elevated serum creatinine and BUN with reduced eGFR

14. grok-2-1212 (USA, Released: 2024-12-12)

Primary Diagnosis: Lupus Nephritis (ICD-10: M32.14) - Confidence: 0.8 **Differential Diagnoses:**

- IgA Nephropathy (ICD: N02.8) 0.6
- ANCA-Associated Vasculitis (ICD: M31.3) 0.5
- Chronic Interstitial Nephritis (ICD: N11.9) 0.4

Key Clinical Findings:

- Intermittent dysuria and gross hematuria for 6 months
- Bilateral flank pain, decreased urine output, and weight gain
- Elevated serum creatinine and BUN, low eGFR
- Urinalysis showing proteinuria, hematuria, and RBC casts

15. gemma-2-9b-it (USA, Released: 2024-06-27)

Primary Diagnosis: Systemic Lupus Nephritis (ICD-10: N17.0) - Confidence: 0.8 **Differential Diagnoses:**

- Acute Interstitial Nephritis (ICD: N17.9) 0.15
- Renal Cell Carcinoma (ICD: C64.9) 0.05
- Glomerulonephritis (Other) (ICD: N03.9) 0.1

Key Clinical Findings:

- Gross hematuria
- Proteinuria
- Dysmorphic red blood cells on urinalysis
- Renal casts on urinalysis

16. gpt-4o (USA, Released: 2024-05-13)

Primary Diagnosis: IgA Nephropathy (ICD-10: N02.8) - Confidence: 0.8

Differential Diagnoses:

- Lupus Nephritis (ICD: M32.14) 0.7
 Alport Syndrome (ICD: Q87.81) 0.6
- Acute Glomerulonephritis (ICD: N00.9) 0.5

Key Clinical Findings:

- Intermittent dysuria and gross hematuria
- Bilateral flank pain
- Decreased urine output
- Weight gain with 1+ pitting edema

17. gemini-2.5-flas (USA, Released: 2024-12-19)

Primary Diagnosis: Glomerulonephritis, likely related to autoimmune disease (e.g., Lupus Nephritis) (ICD-10: N08.5) - Confidence: 0.9

Differential Diagnoses:

- IgA Nephropathy (ICD: N02.8) 0.7
- Post-infectious Glomerulonephritis (ICD: N08.0) 0.5
- Alport Syndrome (ICD: Q87.81) 0.6

Key Clinical Findings:

- 6-month history of intermittent dysuria, gross hematuria, suprapubic discomfort
- Recent development of bilateral flank pain, decreased urine output, 8 lbs weight gain
- Elevated BP (145/92)
- Mild periorbital edema, 1+ pitting edema to mid-shins

18. Ilama-3.2-3b-in (USA, Released: 2024-09-25)

Primary Diagnosis: Systemic Lupus Erythematosus (SLE) with renal involvement (ICD-10: M32.0) - Confidence: 0.9

Differential Diagnoses:

• Interstitial Nephritis (ICD: N17.0) - 0.6

- Glomerulonephritis (ICD: N05.0) 0.5
- Chronic Pyelonephritis (ICD: N35.0) 0.4

Key Clinical Findings:

- Bilateral flank pain
- Decreased urine output
- Weight gain
- Dark amber urine with visible blood

19. gpt-4o-mini (USA, Released: 2024-07-18)

Primary Diagnosis: Glomerulonephritis (ICD-10: N00) - Confidence: 0.8

Differential Diagnoses:

- Interstitial Nephritis (ICD: N10) 0.7
- Renal Stones (ICD: N20) 0.5
- Urinary Tract Infection (ICD: N39.0) 0.4

Key Clinical Findings:

- Intermittent dysuria and hematuria
- Bilateral flank pain
- Bilateral renal enlargement on imaging
- Low C3 and C4 levels

20. qwen-2.5-coder- (China, Released: 2024-11-12)

Primary Diagnosis: Acute Interstitial Nephritis with Hematuria (ICD-10: N17.2) - Confidence: 0.85 **Differential Diagnoses:**

- Renal Cell Carcinoma (RCC) (ICD: C64.9) 0.15
- IgA Nephropathy (ICD: N30.0) 0.1
- Systemic Lupus Erythematosus (SLE) (ICD: M32.9) 0.1

Key Clinical Findings:

- Recurrent hematuria and dysuria for 6 months
- Bilateral flank pain, decreased urine output, and weight gain over 2 weeks
- Recent significant rise in creatinine and BUN
- Positive ANA with homogeneous pattern

21. claude-3-opus-2 (USA, Released: 2024-02-29)

Primary Diagnosis: Lupus nephritis (ICD-10: M32.14) - Confidence: 0.8

Differential Diagnoses:

- Acute interstitial nephritis (ICD: N12) 0.6
- IgA nephropathy (ICD: N02.8) 0.5
- Granulomatosis with polyangiitis (ICD: M31.3) 0.4

Key Clinical Findings:

- Recurrent dysuria, hematuria, and suprapubic discomfort
- Bilateral flank pain and decreased urine output
- Proteinuria, dysmorphic RBCs, and RBC casts on urinalysis
- Elevated creatinine and decreased eGFR

22. lfm-40b (USA, Released: 2024-10-29)