HLDE - 05-evaluaciones: conclusiones-diagnosticas

Sistema HLDE

2025-07-16

Conclusiones Diagnósticas y Evaluación Clínica

Conclusiones Diagnósticas Principales

- 1. Apendicitis Aguda Complicada con Complicaciones Sépticas
- 2. Intestinal Perforation with Multiple Abdominal Abscesses
- 3. Enterocutaneous Fistula
- 4. Sepsis of Abdominal Origin
- 5. Open Abdomen Syndrome (Resolved)

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- 1. Surgical Site Complications
- 2. Nutritional Compromise
- 3. Pleural Effusion (Bilateral)
- 4. Obesity in School-Age Child

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Conclusiones Diagnósticas y Evaluación Clínica

Paciente: Dylan Antonio Martinez Labastida

Expediente Médico: 345370

Edad: 8 años, 8 meses

Período de Evaluación: 06-07-2025 a 14-07-2025

Servicio Primario: UCI Pediátrica

Conclusiones Diagnósticas Principales

1. Apendicitis Aguda Complicada con Complicaciones Sépticas

CIE-10: K35.9 - Apendicitis aguda, no especificada

Severidad: Fase IV (Complicada con perforación y formación de abscesos)

Fecha de Presentación Inicial: 23-06-2025

Intervención Quirúrgica: 27-06-2025 (Hospital externo)

Curso Clínico: - Fase Inicial: Apendicitis aguda enmascarada por tratamiento antibiótico empírico - Desarrollo de Complicaciones: Pelviperitonitis con 50ml de material purulento - Hallazgos Anatómicos: Lisis del apéndice cecal, coprolito libre, ciego friable - Manejo Quirúrgico: Apendicectomía inicial con drenaje Penrose

Evidencia Diagnóstica: - Hallazgos quirúrgicos confirmando perforación apendicular - Cultivo de material purulento positivo - Síndrome clínico compatible con apendicitis complicada

2. Intestinal Perforation with Multiple Abdominal Abscesses

ICD-10: K63.1 - Perforation of intestine (nontraumatic)

Location: Sigmoid colon (5cm perforation)

Associated Findings: Multiple intra-abdominal abscess collections

Anatomical Distribution of Abscesses: - **Subhepatic**: 50ml purulent collection - **Subsplenic**: 50ml purulent collection

- **Right iliac fossa**: 100ml purulent collection - **Pelvic cavity**: 100ml purulent collection - **Total purulent content**: ~300ml fecaloid material

Surgical Findings (06-07-2025): - Hostile abdomen Bjork 3B classification - Dehiscent appendiceal stump - Cecum in poor condition - Primary sigmoid perforation repair performed - Decision for open abdomen management

3. Enterocutaneous Fistula

Type: High-output fistula

Location: Through surgical wound and Penrose drain site

Content: Fecaloid drainage

Management: Conservative initially, then surgical correction

Clinical Impact: - Fluid and electrolyte losses - Nutritional depletion - Infection risk - Delayed wound healing

4. Sepsis of Abdominal Origin

Classification: Severe sepsis with organ dysfunction **Source**: Intra-abdominal infection and abscess collections

Severity Assessment: Required ICU management with organ support

Organ System Involvement: - **Cardiovascular**: Vasopressor requirement (Norepinephrine/Adrenaline) - **Respiratory**: Mechanical ventilation requirement - **Renal**: Fluid overload requiring diuretics - **Neurological**: Sedation requirement for critical care management

Microbiological Profile: - Multiple antibiotic regimens required - Evolution from triple therapy to meropenem monotherapy - Antifungal coverage (Fluconazole) added

5. Open Abdomen Syndrome (Resolved)

Classification: Intentional open abdomen

Management Strategy: Damage control surgery approach

Duration: 06-07-2025 to 11-07-2025 (5 days)

Management Technique: - Fenestrated silicone membrane over bowel - Artisanal vacuum-assisted closure system - Double folded compresses - 14Fr suction tube - Ioban coverage

Resolution: Successful closure achieved 11-07-2025

Secondary Diagnoses

1. Surgical Site Complications

Wound Dehiscence: Resolved with closure **Seroma Formation**: Ongoing, managed with curations **Infection Risk**: Under antibiotic coverage

2. Nutritional Compromise

Type: Protein-energy malnutrition secondary to prolonged illness

Hypoalbuminemia: 1.9-2.2 g/dL (requiring albumin supplementation) **Management**: Parenteral nutrition with enteral stimulation initiation

3. Pleural Effusion (Bilateral)

Etiology: Fluid overload and inflammatory response

Management: Diuretic therapy (Furosemide)

Monitoring: Serial chest radiography

4. Obesity in School-Age Child

BMI: 21.6 (96th percentile, Z-score 1.8)

Classification: Overweight progressing to obesity

Nutritional Assessment: Waterlow/Gomez classification

Surgical Interventions Summary

Surgery #1: 27-06-2025 (External Hospital)

• Procedure: Open appendectomy

• Findings: Complicated appendicitis Phase IV

• **Complications**: Enterocutaneous fistula development

Surgery #2: 06-07-2025 (Current Hospital)

• **Procedure**: Exploratory laparotomy + Central venous catheter placement

• Findings: Multiple abscesses, intestinal perforation

• Management: Abscess drainage, primary repair, open abdomen

• Blood loss: 300ml, transfusion required

Surgery #3: 08-07-2025

• **Procedure**: Exploratory laparotomy + Ileostomy creation

- Findings: Dehiscent sigmoid repair
- Management: Primary closure + protective ileostomy
- Classification: Hostile abdomen Bjork IIA

Surgery #4: 11-07-2025

- Procedure: Exploratory laparotomy + Abdominal wall closure
- **Findings**: Good bowel condition, subhepatic abscess (50ml)
- Management: Cavity wash, Penrose drainage, wall closure
- Blood loss: 20ml (minimal)

Laboratory Evolution

Hematological Parameters

- Initial WBC: 17,520 (elevated, infection)
- Current trend: Improving inflammatory markers
- Platelet count: Initially elevated (820K), normalizing
- Hemoglobin: Required transfusion support initially

Biochemical Profile

- **Albumin**: Low (1.9-2.2 g/dL) requiring supplementation
- **Renal function**: Preserved (Creatinine 0.2 mg/dL)
- Liver function: Normal transaminases
- **Electrolytes**: Generally balanced with monitoring

Coagulation Studies

- Initial INR: 1.25-1.41 (mildly elevated)
- Management: Vitamin K supplementation
- **Fibrinogen**: Variable (258-396 mg/dL)

Imaging Studies Summary

Abdominal Ultrasound (04-07-2025)

- Bowel edema with regional dilation
- · Liquid content without visible peristalsis
- Bilateral hydronephrosis

Abdominal Radiography

- · Hydroaeric levels in right upper quadrant
- · Psoas muscle effacement
- · Gastric tube in position

Chest CT (07-07-2025)

- Normal heart morphology
- Central venous catheter in right atrial position
- Bilateral atelectasis and pleural effusion
- · Interstitial thickening peripherally

Prognostic Assessment

Immediate Prognosis (1-7 days)

Status: **Cautiously Optimistic** - Successful extubation achieved - Hemodynamic stability without vasopressors - Abdominal wall closure successful - Infection responding to therapy

Short-term Prognosis (1-4 weeks)

Status: Guarded - Continued antibiotic therapy required - Wound healing monitoring essential - Nutritional rehabilitation needed - Risk of complications remains

Long-term Prognosis (>1 month)

Status: Reserved to Evolution - Ileostomy reversal consideration - Full functional recovery assessment - Nutritional status restoration - Growth and development monitoring

Risk Stratification

High-Risk Factors

- · Complex intra-abdominal infection
- Multiple surgical interventions
- Prolonged critical illness
- Nutritional compromise
- · Age-related vulnerability

Protective Factors

- Appropriate antibiotic response
- · Successful surgical interventions
- · Hemodynamic recovery
- · Neurological integrity maintained
- · Family support system

Clinical Outcome Measures

Achieved Milestones

- 1. Infection source control Surgical debridement completed
- 2. Hemodynamic stability Vasopressor weaning successful
- 3. Respiratory independence Extubation successful
- 4. Abdominal wall integrity Closure achieved
- 5. Pain management Adequate analgesia established
- 6. **Neurological recovery** Alert and responsive

Ongoing Objectives

- 1. Complete infection resolution Antibiotic course completion
- 2. Nutritional rehabilitation Enteral feeding advancement
- 3. Wound healing optimization Seroma resolution
- 4. Functional recovery Mobility restoration
- 5. Family reintegration Discharge planning preparation

Future Considerations

- 1. **Ileostomy reversal** Timing and feasibility assessment
- 2. **Growth monitoring** Long-term nutritional impact
- 3. **Psychological support** Trauma and hospitalization impact
- 4. Surgical follow-up Long-term complication surveillance

Conclusion

This 8-year-old male patient presented with a complex cascade of surgical complications beginning with masked acute appendicitis that progressed to complicated intra-abdominal sepsis requiring multiple surgical interventions and intensive care management. The clinical course demonstrates the challenges of managing complicated appendicitis in pediatric patients, particularly when initial presentation is modified by empirical antibiotic therapy.

The successful management involved a multidisciplinary approach with damage control surgery principles, appropriate antibiotic therapy, and intensive care support. Key turning points included successful source control, hemodynamic stabilization, and respiratory weaning.

Current status shows significant improvement with transition from critical to stable condition, though continued vigilance for complications remains essential. The prognosis is cautiously optimistic for recovery, though long-term sequelae require ongoing assessment.

Final Assessment Date: 14-07-2025

Clinical Status: Stable with ongoing treatment

Disposition: Continued ICU monitoring with progressive care advancement