

ENFERMEDAD INFLAMATORIA DEL INTESTINO

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Pour l'amour des enfants



Université 
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ENFERMEDAD INFLAMATORIA DEL INTESTINO

Incidence, Pattern, and Etiology of Elevated Liver Enzymes in Pediatric Inflammatory Bowel Disease

Antoinette J. Pusateri, Sandra C. Kim, Jennifer L. Dotson, Jane P. Balint, Carol J. Potter, Brendan M. Boyle, and Wallace V. Crandall

TABLE 4. Character and chronicity of ELE for patients with CD and patients with UC (n = 128)

| Category | CD n (%) | UC n (%) | Total | P |
|--------------------|-----------|----------|-------|------|
| Hepatic | | | | |
| 0 | 24 (37.5) | 7 (25) | 31 | 0.02 |
| 1 | 3 (4.7) | 5 (17.9) | 8 | |
| 2a | 8 (12.5) | 7 (25) | 15 | |
| 2b | 17 (26.6) | 9 (32.1) | 26 | |
| 3 | 11 (17.2) | 0 (0) | 11 | |
| 4 | 1 (1.6) | 0 (0) | 1 | |
| Cholestatic | | | | |
| 0 | 1 (11.1) | 0 (0) | 1 | 0.86 |
| 1 | 2 (22.2) | 0 (0) | 2 | |
| 2a | 1 (11.1) | 0 (0) | 1 | |
| 2b | 2 (22.2) | 3 (50) | 5 | |
| 3 | 2 (22.2) | 2 (33.3) | 4 | |
| 4 | 1 (11.1) | 1 (16.7) | 2 | |
| Mixed | | | | |
| 0 | 2 (13.3) | 1 (16.7) | 3 | 0.33 |
| 2a | 2 (13.3) | 0 (0) | 2 | |
| 2b | 4 (26.7) | 0 (0) | 4 | |
| 3 | 5 (33.3) | 5 (83.3) | 10 | |
| 4 | 2 (13.3) | 0 (0) | 2 | |

CD=Crohn disease; ELE=elevated liver enzymes; UC=ulcerative colitis.

0: < 30 días
 1: prolongado intermitente
 2a y b: prolongado constante
 3: crónico intermitente
 4: crónico constante

30-180 días
 > 180 días

0= TRANSITORIO VS 4= CRONICO

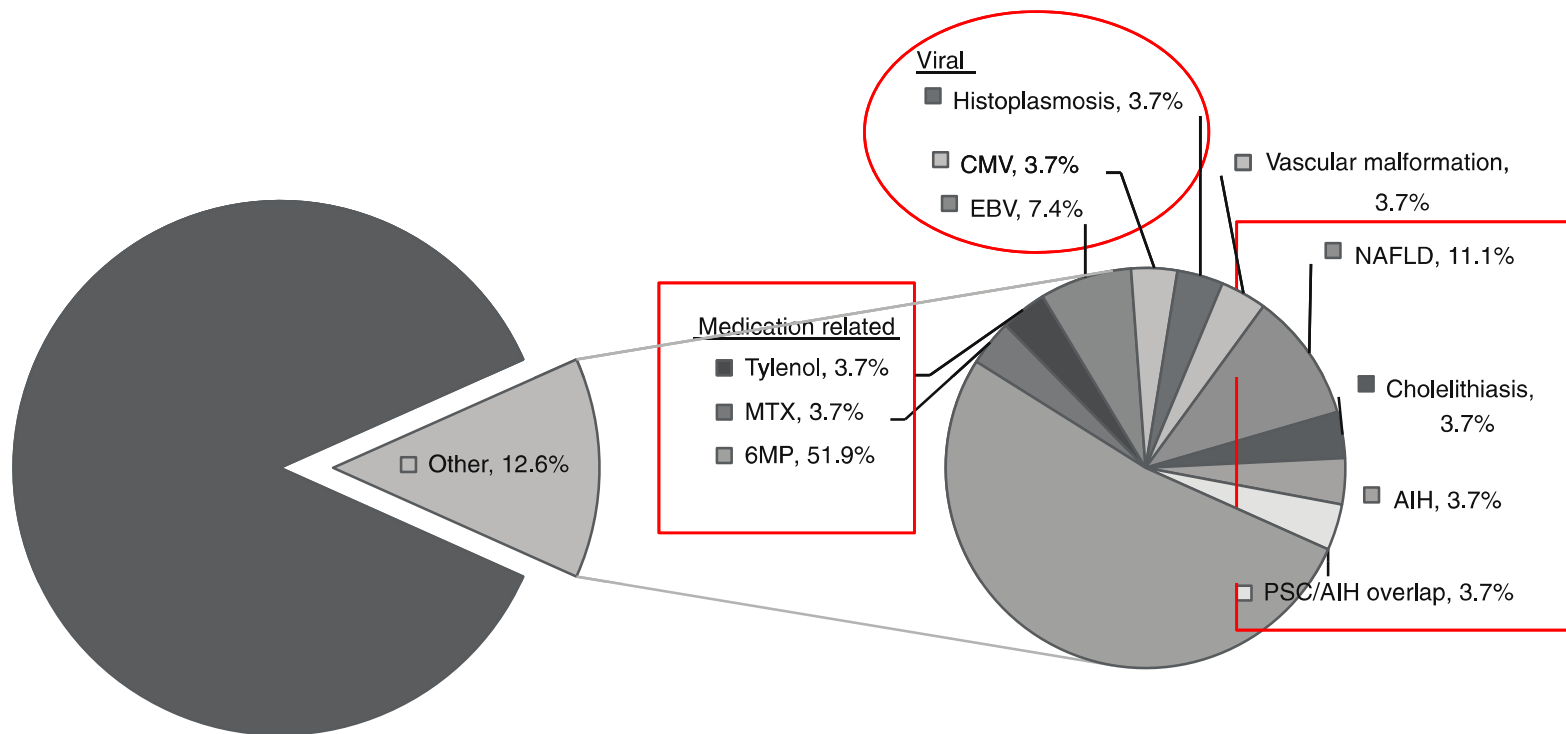
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TABLE 5. Degree of ELE for patients with CD and patients with UC

| | Category | Total | CD, n (%) | UC, n (%) | <i>P</i> |
|-----|----------|-------|------------|-----------|----------|
| ALT | 0–1×ULN | 81 | 60 (39.5) | 21 (33.9) | 0.334 |
| | >1–2×ULN | 66 | 50 (32.9) | 16 (25.8) | |
| | >2–4×ULN | 42 | 27 (17.8) | 15 (24.2) | |
| | >4×ULN | 25 | 15 (9.9) | 10 (16.1) | |
| AST | 0–1×ULN | 60 | 42 (27.6) | 18 (29) | 0.674 |
| | >1–2×ULN | 107 | 79 (52) | 28 (45.2) | |
| | >2–4×ULN | 38 | 26 (17.1) | 12 (19.4) | |
| | >4×ULN | 9 | 5 (3.3) | 4 (6.5) | |
| AP | 0–1×ULN | 160 | 117 (79.6) | 43 (74.1) | 0.534 |
| | >1–2×ULN | 42 | 27 (18.4) | 15 (25.9) | |
| | >2–4×ULN | 2 | 2 (1.4) | 0 (0) | |
| | >4×ULN | 1 | 1 (0.7) | 0 (0) | |
| GGT | 0–1×ULN | 50 | 34 (81) | 16 (88.9) | 0.623 |
| | >1–2×ULN | 4 | 3 (7.1) | 1 (5.6) | |
| | >2–4×ULN | 2 | 1 (2.4) | 1 (5.6) | |
| | >4×ULN | 4 | 4 (9.5) | 0 (0) | |
| DB | 0–1×ULN | 183 | 130 (90.3) | 53 (91.4) | 0.941 |
| | >1–2×ULN | 15 | 10 (6.9) | 5 (8.6) | |
| | >2–4×ULN | 2 | 2 (1.4) | 0 (0) | |
| | >4×ULN | 2 | 2 (1.4) | 0 (0) | |

ALT = alanine transaminase; AP = alkaline phosphatase; AST = aspartate transaminase; CD = Crohn disease; DB = direct bilirubin; ELE = elevated liver enzymes; GGT = gamma-glutamyltranspeptidase; UC = ulcerative colitis; ULN = upper limit of normal.

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Abnormal Liver Biochemistry Is Common in Pediatric Inflammatory Bowel Disease: Prevalence and Associations

Pamela L. Valentino, MD,^{*,†,‡,§} Brian M. Feldman, MD,^{†,‡,§,||} Thomas D. Walters, MBBS,^{*,†} Anne M. Griffiths, MD,^{*,†} Simon C. Ling, MB, ChB,^{*,†} Eleanor M. Pullenayegum, PhD,[§] and Binita M. Kamath, MBBChir^{*,†}

TABLE 3. Multivariable Cox Proportional Hazards Model for the Development of Abnormal Liver Enzymes Above the ULN in Patients with IBD

| Variables | HR Estimates (95% CI) | <i>P</i> |
|---|--------------------------|-----------------|
| Likelihood ratio, chi-square (df) | 98.2 (7) | < 0.0001 |
| IBD diagnosis: CD versus UC | 1.6 (0.9–2.9) | 0.10 |
| Age | 1.1 (1.0–1.2) | 0.02 |
| Medications | | |
| Corticosteroids (oral or intravenous) | 1.4 (0.8–2.4) | 0.19 |
| Metronidazole or Ciprofloxacin | 4.7 (2.9–7.4) | < 0.0001 |
| Sulfasalazine | 0.3 (0.2–0.7) | 0.003 |
| Mesalazine | 0.5 (0.2–1.0) | 0.04 |
| Exclusive enteral nutrition (Tolerex or Modulen IBD) | 3.7 (1.5–9.0) | 0.004 |

Abnormal liver enzymes: 104/285 patients without chronic liver disease.
Bold values indicate statistical significance $P < 0.05$.

- RIESGO AUMENTA CON LA EDAD
- MEDICAMENTOS AUMENTAN EL RIESGO, SALVO SULFASALAZINA Y MESALAZINA.

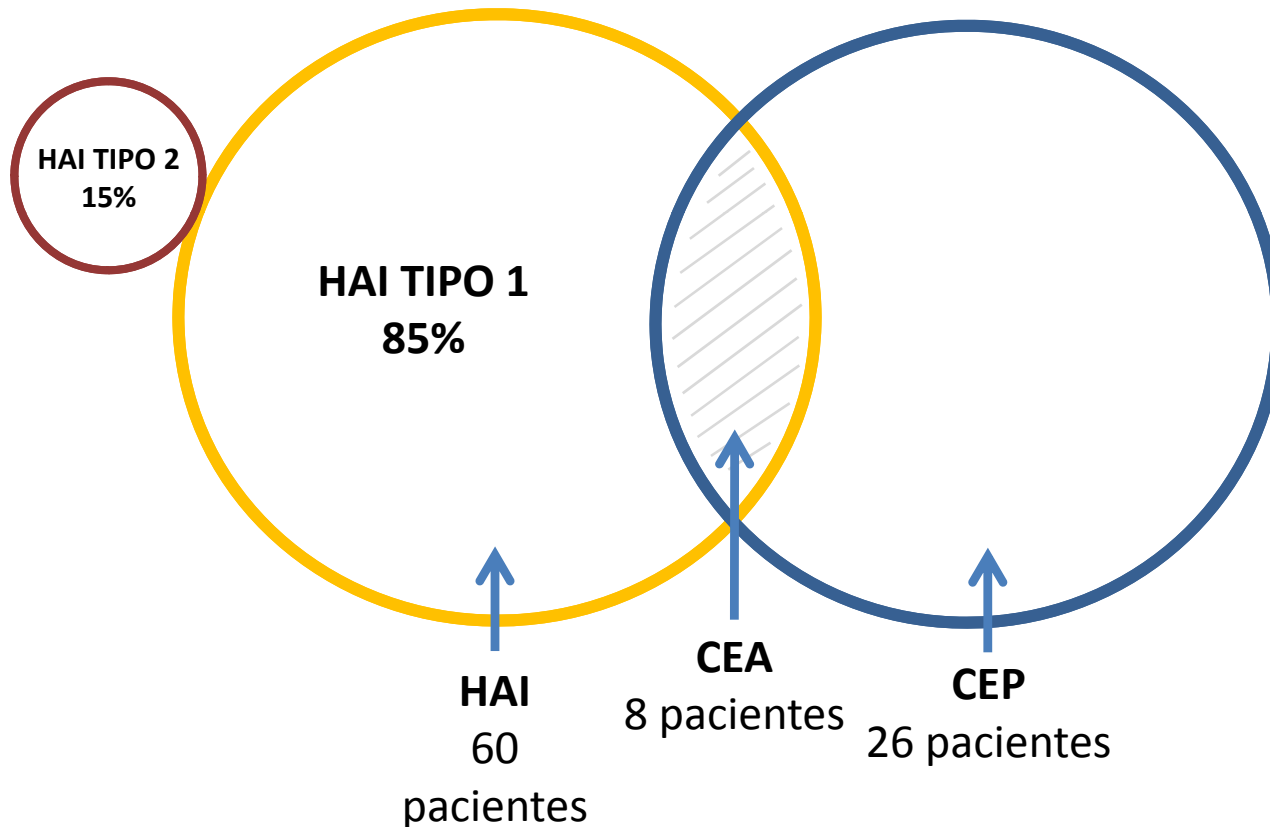
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COMPLICACIONES:

- LITIASIS BILIARES (11-34% EN CROHN)
- COLANGITIS ESCLEROSANTE (3-5% EN CU Y 2,5% EN CROHN)
- HIGADO GRASO (23%)
- TROMBOSIS DE LA VENA PORTA EN PACIENTES CON PROCTO-COLECTOMIA)

ENFERMEDADES AUTOINMUNES DEL HIGADO

REVISION DE PACIENTES DEL CHU-STE JUSTINE



HAI : HEPATITIS AUTOINMUNE
CEA: COLANGITIS ESCLEROSANTE AUTOINMUNE
CEP: COLANGITIS ESCLEROSANTE PRIMITIVA

ENFERMEDADES AUTOINMUNES DEL HIGADO

HIGADO

ASOCIACION CON EII

HAI

4/60 pts

6.6%

CU: 1
Crohn: 3

CEA

3/8 pts

37.5%

CU: 3

CEP

19/26pts

73%

CU or CI: 10
Crohn: 9

ENFERMEDADES AUTOINMUNES DEL HIGADO

CLINICA

| | AIH | AIC | PSC |
|------------------|------|-------|-------|
| Mean age (years) | 10.3 | 13.3 | 1.4 |
| Females | 70% | 50% | 42% |
| Jaundice | 50% | 37.5% | 7.6% |
| Cirrhosis | 49% | 43% | 38.5% |
| Hepatic failure | 42% | 37.5% | 0% |

ENFERMEDADES AUTOINMUNE DEL HIGADO

DIAGNOSTICO DIFERENCIAL

- COMPARACION DEL LABORATORIO DE ESTOS PACIENTES:
 - **HAI:** Niveles mas elevados de Bi, ALT and IgG.
 - **HAI:** Niveles mas bajos de GGT (marcador de injuria ductular).

ENFERMEDADES AUTOINMUNES DEL HIGADO

RESUMEN DEL DIAGNOSTICO DIFERENCIAL

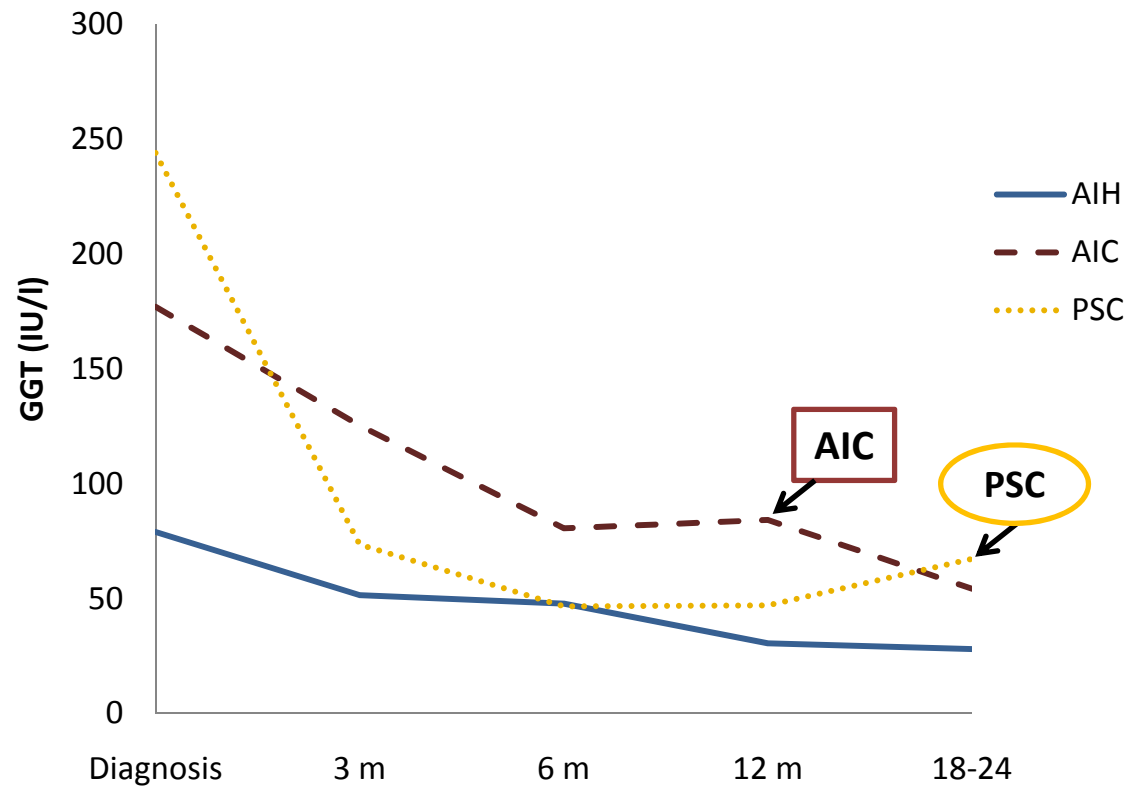
- PREDOMINIO **FEMENINO** SOLAMENTE EN EL GRUPO HAI.
- PRESENTACION COMO **HEPATITIS AGUDA** MAS FRECUENTE EN EL GRUPO HAI.
- **CIRROSIS** EN EL MOMENTO DL DIAGNOSTICO ES MAS FRECUENTE EN LOS GRUPOS HAI/CEA.
- INICIALMENTE LA HAI/CEA PRESENTAN **FALLO HEPATICO** MAS FRECUENTEMENTE.

ENFERMEDADES AUTOINMUNES DEL HIGADO

SEGUIMIENTO

INJURIA DE LA VIA BILIAR

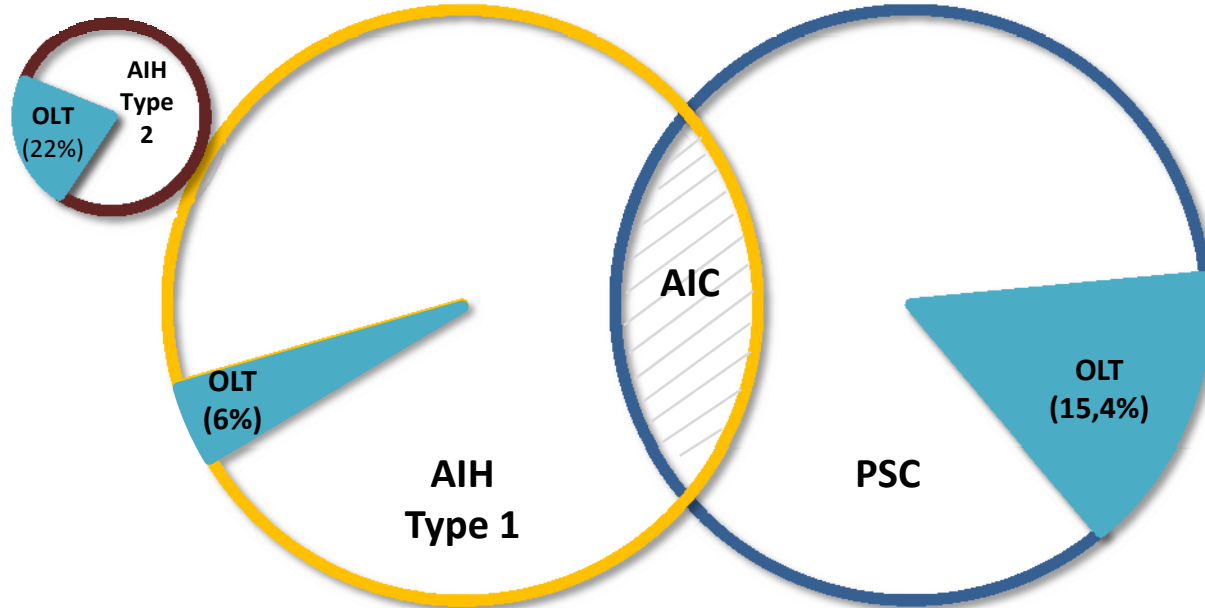
GGT



ENFERMEDADES AUTOINMUNES DEL HIGADO

PRONOSTICO

TRASPLANTE HEPATICO



ENFERMEDADES AUTOINMUNES DEL HIGADO

PREGUNTAS

- Cuando indicar una colonoscopia.
- Con que frecuencia debe repetirse en niños con colitis.
- Cual es el pronóstico de los niños con CEA.
- Que marcadores nos permitirán individualizar el tratamiento.

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