

Paciente con ascitis: ¿Es por cirrosis u otra causa? ¿Cómo lo estudio?

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Introducción

- Ascitis: acumulación anormal de líquido en la cavidad peritoneal

↑ Presión
hidrostática
capilar

↓ Presión
oncótica
capilar

Alteración
peritoneal

Etiología



Classification	Cause of ascites	
Liver disease	Liver cirrhosis	75-80%
	Acute liver failure	
	Budd-Chiari syndrome	
	Sinusoidal obstruction syndrome	
Non-hepatic cause	Cancer (peritoneal carcinomatosis, massive liver metastases, etc.)	10%
	Tuberculous peritonitis	2%
	Heart failure	5%
	Pancreatitis	
	Nephrotic syndrome	
	Postoperative lymphatic leak	
	Myxedema	
Mixed ascites	Cirrhosis plus another cause for ascites	5%

Diagnóstico

Anamnesis	Aumento de volumen abdominal/ Síntomas derivados ascitis-enfermedad base
Examen Físico	Matidez desplazable 1500 cc LA (S83% E 56%) -> Error dg en 1/3 pacientes Signos propios enfermedad de base
Imágenes	Ecotomografía abdominal evidenciable ascitis > 100 cc, exámen inicial de > costo-efectividad para confirmar ascitis y orientar enfermedad de base TC o RM alta sensibilidad dg ascitis
Paracentesis diagnóstica	Método más rápido y costo-efectivo para determinar la etiología de la ascitis , además de descartar infección

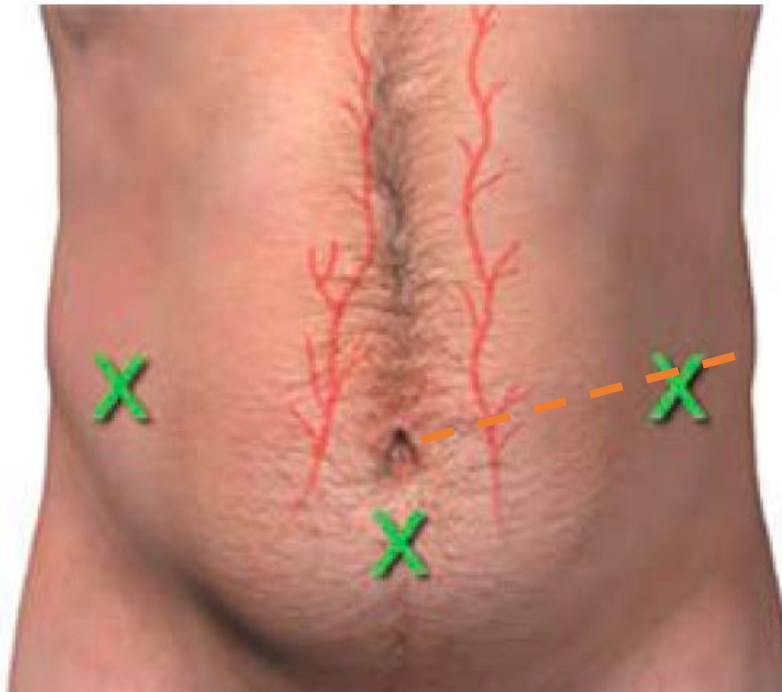
Paracentesis diagnóstica

A diagnostic paracentesis should be performed in **all patients with new onset** Grade 2 or 3 ascites, in all patients hospitalized for worsening of ascites, and **in all patients with any complication of cirrhosis** (including fever, abdominal pain, gastrointestinal bleeding, hepatic encephalopathy, hypotension, or renal insufficiency) (AASLD I,C / EASL II-2, 1)

Paracentesis diagnóstica

Sev
in 1

I. PA
Servic



Cath

centesis for ascites

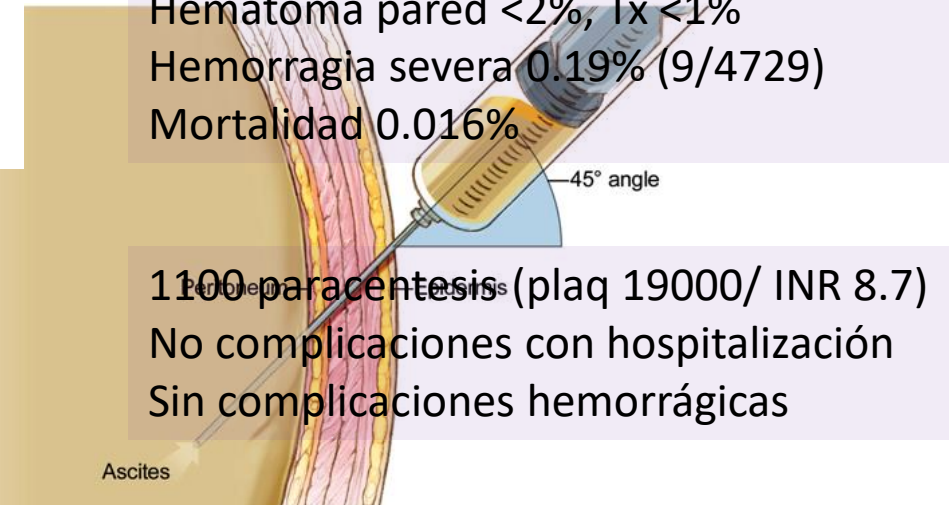
Pharmacol Ther 2005; 21: 525–529.
-Luc, Montréal, Québec, Canada

centesis

Melton, Beverly J. Ott, and
EPATOLOGY 2004;40:484–488.

4729 paracentesis (plaq 19000/INR 8.7)
Hematoma pared <2%, Tx <1%
Hemorragia severa 0.19% (9/4729)
Mortalidad 0.016%

1100 paracentesis (plaq 19000/ INR 8.7)
No complicaciones con hospitalización
Sin complicaciones hemorrágicas

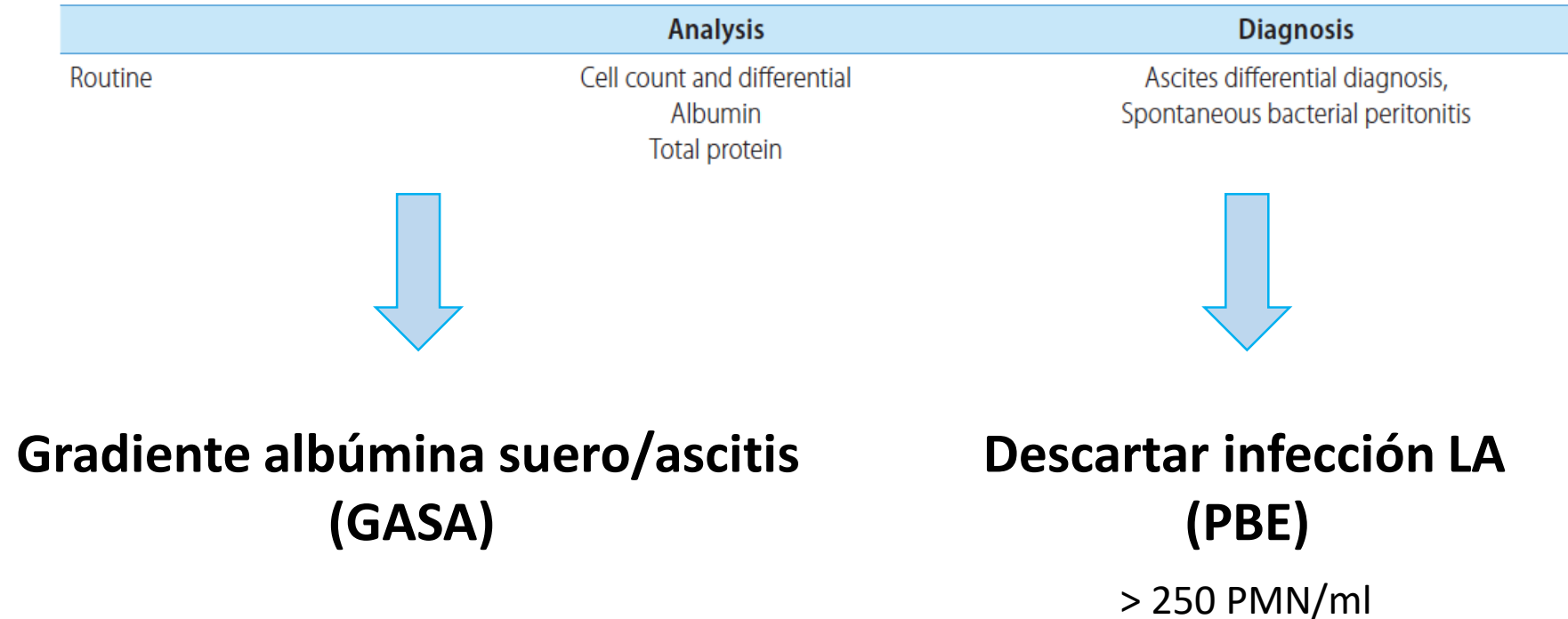


**ly uncommon, the routine prophylactic
or platelets before paracentesis is not
recommended. (Class III, Level C)**

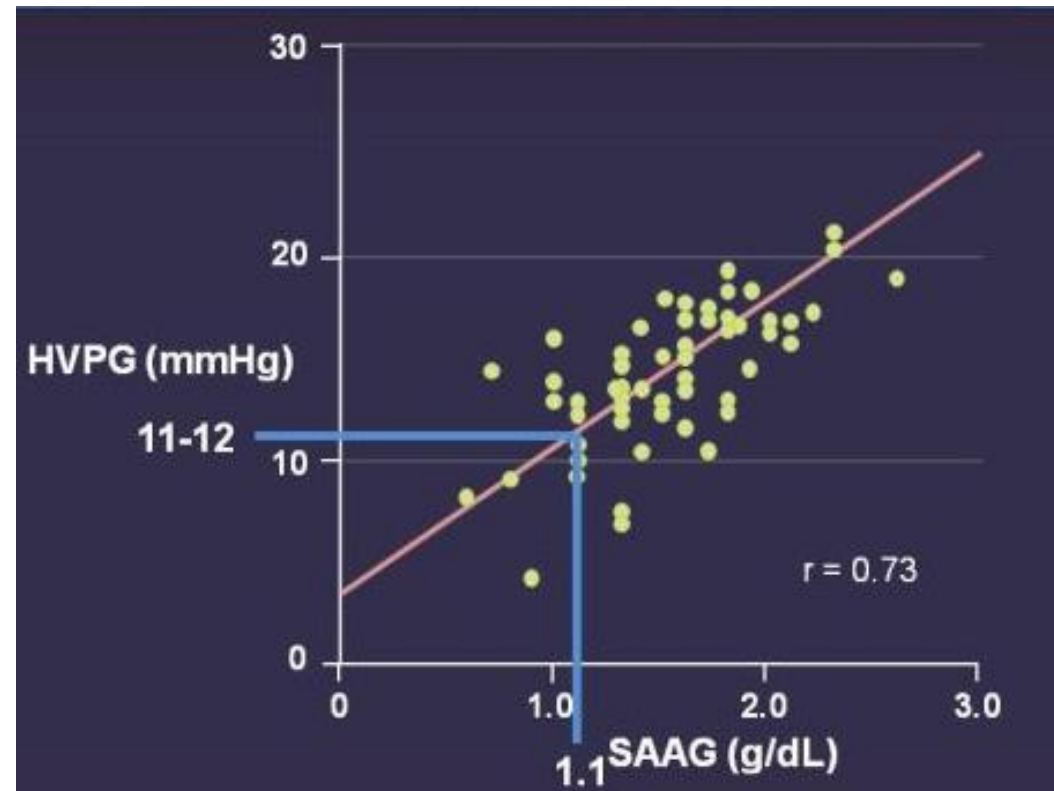
Estudio líquido ascítico

	Analysis	Diagnosis
Routine	Cell count and differential Albumin Total protein	Ascites differential diagnosis, Spontaneous bacterial peritonitis
Optional	Gram stain Culture in blood culture bottle Cytology Acid-fast bacilli smear and culture Adenosine deaminase Lactate dehydrogenase Glucose Carcinoembryonic antigen Alkaline phosphatase Amylase Triglyceride Bilirubin Urea, creatinine	Bacterial infection Malignant ascites Tuberculous peritonitis Secondary bacterial peritonitis Pancreatic ascites Chylous ascites Biliary tract perforation Urinary ascites

Estudio líquido ascítico



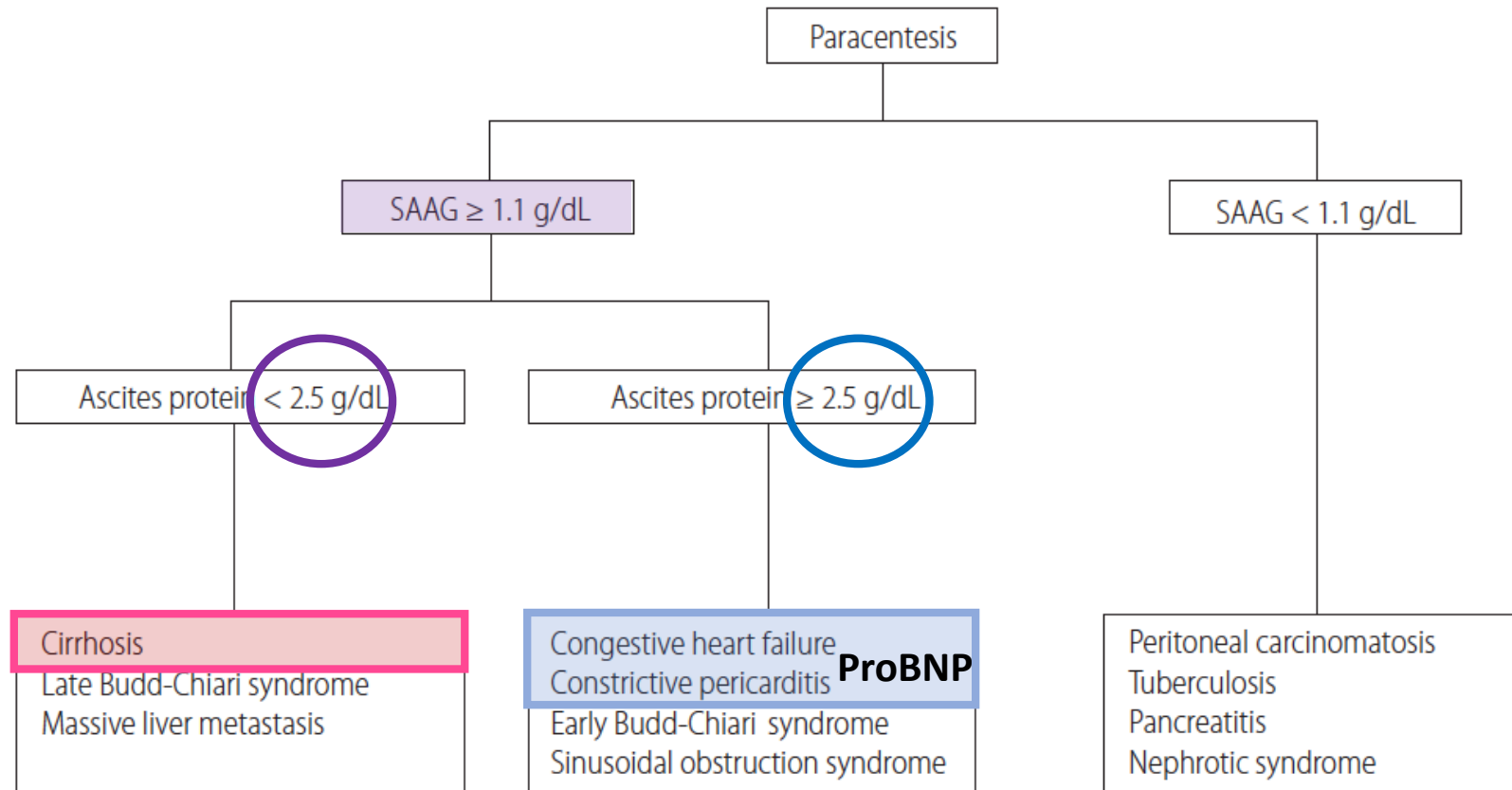
Correlación GASA con presión sinusoidal



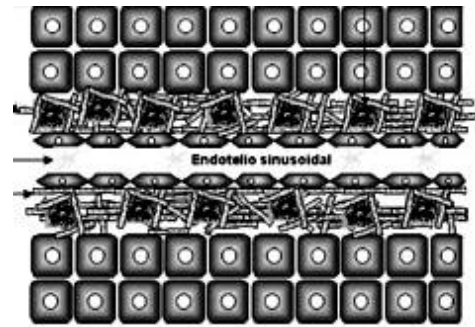
$GASA \geq 1.1 = 90\%$ Hipertensión portal

Acuracidad 97%

Diagnostico diferencial

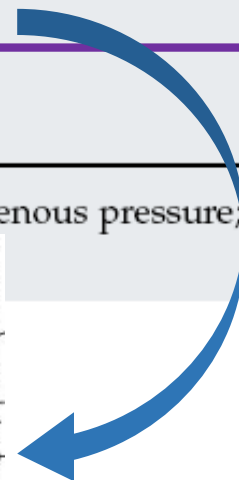
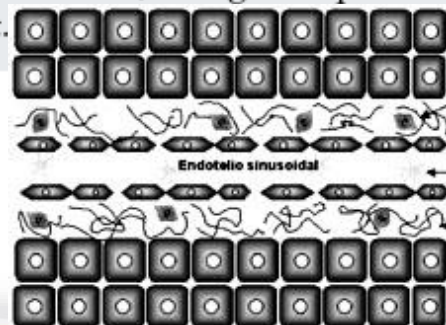


GASA 1.1

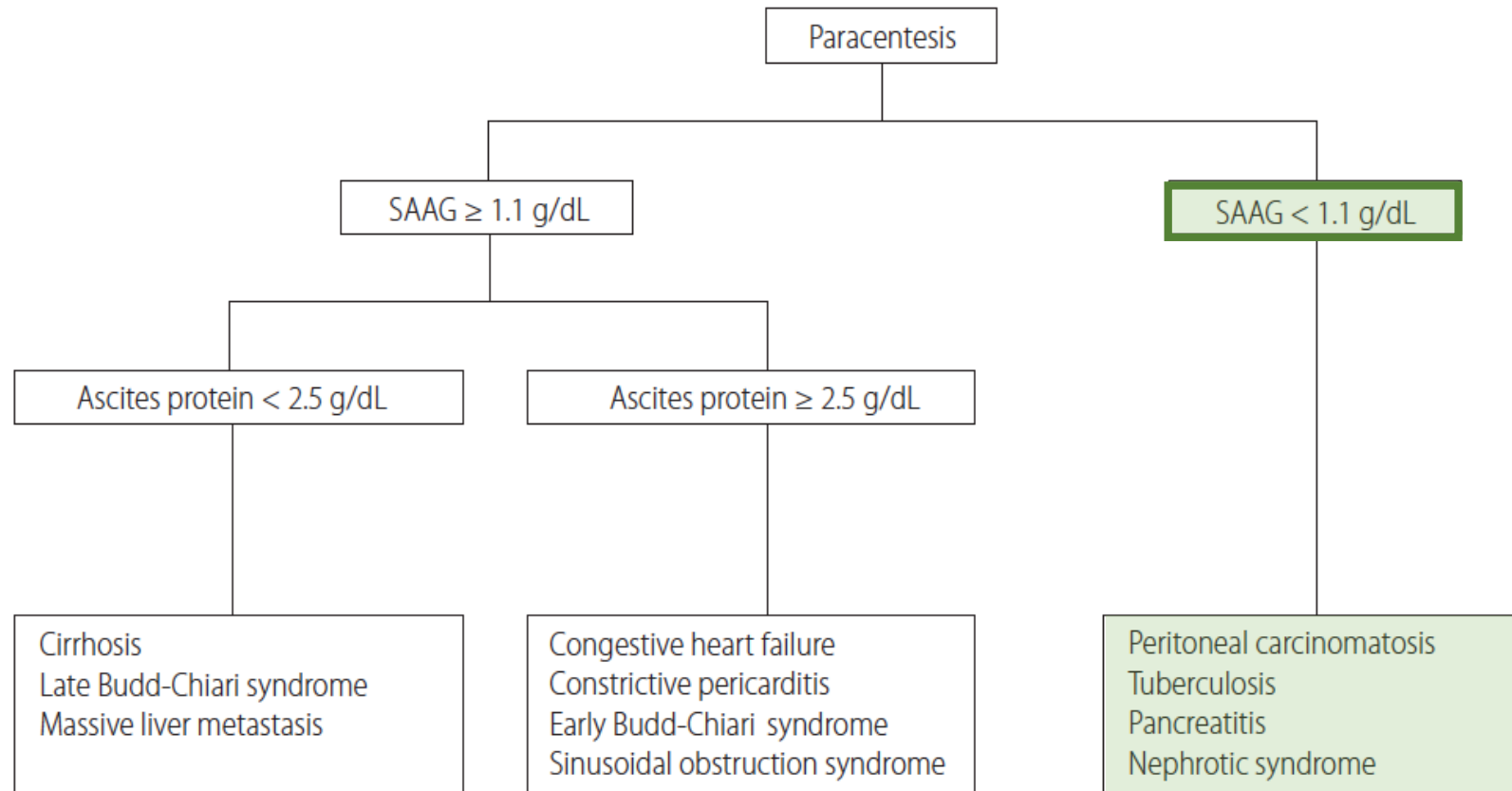


	Serum-ascites albumin gradient (cutoff 1.1 g/dL)	Ascites protein (cutoff 2.5 g/dL)	Hepatic vein pressures*		
			WHVP	FHVP	HVPG
Cirrhosis	High	Low	High	Normal	High
Cardiac ascites	High	High	High	High	Normal
Peritoneal malignancy/ peritoneal TB	Low	High	Normal	Normal	Normal

*Only to be performed in equivocal cases. WHVP, wedged hepatic venous pressure; FHVP, free hepatic venous pressure; HVPG, hepatic venous pressure gradient.



Diagnostico diferencial



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Gram	Sedimentación 50 cc LA	Sensibilidad < 10%
Cultivo	Botella HC 10 cc LA	Sensibilidad 50-80%

➡ *Opcional en pctes ambulatorios sin sospecha de infección (2% PBE)

Jeffries MA. Unsuspected infection is infrequent in asymptomatic outpatients with refractory ascites undergoing therapeutic paracentesis. *Am J Gastroenterol* 1999; 94:2972-2976.
Evans LT. Spontaneous bacterial peritonitis in asymptomatic outpatients with cirrhotic ascites. *Hepatology* 2003;37:897-901

➡ Rutina en pcte que se hospitalice por ascitis, sospecha de infección o descompensación de cirrosis

Estudio líquido ascítico

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Optional	Gram stain Culture in blood culture bottle	Bacterial infection
	Cytology	Malignant ascites

Carcinomatosis peritoneal
Ascitis relacionada a neoplasia

S 96% con 3 muestras 50 cc (3 paracentesis)
2/3 carcinomatosis

→ Sensibilidad global 58-75%

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	Acid-fast bacilli smear and culture Adenosine deaminase	Tuberculous peritonitis

BK Sensibilidad 0-2 %
 Cultivo 1000 cc LA sensibilidad 62-83% 50 cc LA sensibilidad < 50%
 ADA > 32-40 U/L sensibilidad 100% especificidad 96.6-100%

➡ Precaución en cirróticos, disminución sensibilidad

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	Culture in blood culture bottle	
	Cytology	Malignant ascites
	Acid-fast bacilli smear and culture Adenosine deaminase	Tuberculous peritonitis
	Lactate dehydrogenase Glucose Carcinoembryonic antigen Alkaline phosphatase	Secondary bacterial peritonitis
LDH	n LA / sérica 0.4	PBS > 1
Glucosa	n LA = plásmatica	PBS < 50 mg/dl
ACE		PBS > 5 ng/ml
FA		PBS > 240 U/L

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	Amylase	Pancreatic ascites

Relación LA / plasma 0.4

ascitis pancreática > 6

> 1000 mg/dL

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	Triglyceride	Chylous ascites

TGL > 200 mg/dL

Etiología: Neoplásica / infecciosa / alteración linfáticos / PostQx / TBC / Cirrosis (11%)

→ Cirróticos 0.5-1% ascitis quilosa

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Normal 40% plásmatica

Bilirrubina > plásmatica: perforación vesicular

Conclusiones

- Se recomienda realizar una paracentesis diagnóstica a todos los pacientes con ascitis de inicio reciente, y en aquellos hospitalizados por empeoramiento de la ascitis o cualquier complicación de la cirrosis
 - Procedimiento seguro
- Calcular gradiente de albúmina suero/ascitis
 - $GASA \geq 1.1$ 90% HTP
- Los estudios complementarios del LA se deben orientar según GASA, celularidad y sospecha clínica