

These are *general* findings, always discuss with Senior

GENERAL POINTS

- Accumulation of fluid within the peritoneal cavity
- Often undetectable <500mls
- **Cause:**
 - Multiple potential aetiologies:
 - Most commonly caused by **Portal Hypertension**
- **Common signs & symptoms:**
 - Abdominal distension
 - Abdominal pain
 - SOB
 - Nausea / decreased appetite
 - Weight gain

INDICATION FOR ASCITIC TAP / DRAIN

- **TAP:**
 - Every patient with decompensated cirrhosis
 - Suspected Spontaneous Bacterial Peritonitis (SBP)
 - Diagnosis is unclear
- **DRAIN:**
 - Volume of ascites is causing discomfort / nausea and vomiting or SOB

ASCITIC TAP INVESTIGATIONS

- MC&S
- Total protein
- Albumin
- +/- Cytology (if cancer suspected)
- +/- Amylase (if pancreatitis suspected)
- +/- Acid fast bacilli (if TB suspected)

ASCITIC FLUID ANALYSIS

APPEARANCE

**CLEAR /
TRANSLUCENT
YELLOW**

- Normal appearance
- Portal hypertension secondary to cirrhosis

TURBID / CLOUDY

- Infection - SBP
- Pancreatitis
- Perforated bowel

BLOODY

- Traumatic tap
- Malignancy
- Haemorrhagic pancreatitis

CHYLOUS

Milky with high triglyceride concentration

- Malignancy
- Lymphoma
- Tuberculosis
- Occasionally cirrhosis

MICROSCOPY

RBC

None

- Normal

>100/ μ l

- Malignancy
- TB

>100,000/ μ l

- Haemorrhage:
 - Pancreatitis
 - Trauma

WBC

<250/ μ l

- Normal

>250/ μ l +
predominantly
Neutrophils

- SBP

>250/ μ l +
predominantly
Lymphocytes

- TB
- Post operative / trauma
- Lymphocytic malignancy
- +/- chronic cirrhosis

Serum Ascitic Albumin Gradient (SAAG)*

* SAAG = serum albumin - ascitic fluid albumin

**HIGH SAAG
> 1.1g/dL**

**TRANSUDATE
- systemic disease -**

- Liver cirrhosis / Portal hypertension
 - Total protein <2.5g/dL
- Cardiac:
 - RHF / CCF
 - Total protein >2.5g/dL
 - Constrictive pericarditis
- Renal:
 - Failure
 - Nephrotic syndrome
- Low albumin
- Budd-Chiari

**low SAAG
< 1.1g/dL**

**EXUDATE
- local disease -**

- Malignancy
- Fungal/parasitic infections
- Autoimmune conditions:
 - SLE / HSP
- Infection
 - especially TB
- Endometriosis