**8. Abnormal LFTs By Yuying Luo**

**Overview:**

* Patterns of abnormal liver function tests:
	+ **Hepatocellular Damage:** predominately elevated AST, ALT
		- AST: ALT = 1
			* >300s: ischemic, viral, drug-induced
			* <300 (mildly elevated): NASH, EtOH, medications
		- AST:ALT >2.5: EtOH hepatitis
			* Alcohol induced deficiency of pyrodixal phosphate
			* Usually < 200s
	+ **Cholestatic pattern:** elevated alk phosphatase, GGT, bilirubin
		- Alkaline phosphatase: produced in hepatocytes, bone, placenta, small intestine
		- GGT: liver specific and a sensitive marker of EtOH ingestion
		- Bilirubin:
			* Isolated hyperbilirubinemia: unconjugated vs conjugated
				+ Unconjugated: hemolysis, drugs, genetic diseases (Gilbert’s)
				+ Conjugated: obstructive most commonly
* Markers of synthetic function:
	+ PT/INR, albumin
* Approach to abnormal LFTs:
	+ Discontinue any hepatotoxic medications, alcohol use, evaluate for metabolic syndrome and then repeat testing in 2-4 weeks
		- If alk phos is elevated, check GGT
	+ Persistent or unexplained ALT and AST abnormalities should be worked-up further:
		- HCV, HBV; serum iron, ferritin, TIBC; INR, albumin, CBC
		- Consider RUQ U/S

**AT IMA**

* **Who to screen for hepatitis C?**
	+ Persons at high risk for infection (e.g. IVDU)
	+ One time screening in adults born between 1945 and 1965
* Order: "Hep C surface Ab with reflex to RNA PCR"
* If positive🡪
	+ All patients with virologic evidence of chronic HCV infection (detectable HCV viral level over a six-month period) should be considered for antiviral treatment and referred to IMA Liver
	+ IMA liver = hepatitis C clinic – Tues PM, Wed AM, Fri PM
		- This clinic has care coordinators and on-staff psychologists who help run support group meetings. There is a lot of psychosocial support for these patients, so event more of a reason to refer patients!
* After initiation of treatment🡪
	+ Quantitative HCV RNA is repeated at week 4 of therapy
	+ Sustained Virologic Response (SVR) defined as undetectable viral load at 12 weeks following cessation of therapy

**Community Resources:**

* For patients with presumed NASH and poor dietary habits, consider screening for food insecurity
* New York syringe exchange programs for IVDU:[**https://nasen.org/directory/ny/**](https://nasen.org/directory/ny/)