Gallstones, cholecystitis, choledocholithiasis

Background data

Prevalence of cholelithiasis in Canada is 10-20%. Higher risk in first nations populations, women, pregnant, if there is family history of gallstones.

Up to 80% of cholelithiasis is **asymptomatic**. New **symptom** incidence 1-4% annually. In symptomatic patients complications occur in 1-3% annually. After first episode of biliary colic 50% of people will have recurrent symptoms.

Even though **stones and sludge** have slightly different composition, natural history, risk of symptoms and complications, management and decision making is the same. 90+% of stones are cholesterol, minority will be pigmented.

Prevention of stone formation

Medications - in high risk populations (rapid weight loss, long term somatostatin analog therapy in NETs, TPN, HRT) URSO not routinely used in North America. Statins and ezetimibe use is controversial. Prophylactic cholecystectomy not indicated.

Lifestyle and diet – high fiber and high calcium diet, vitamin C, polyunsaturated fats and nuts are protective. Prevention of obesity and diabetes decreases risk of stone formation as well as decreases risk of symptom development in patients with asymptomatic cholelithiasis. Intermittent fasting increases risk of sludge and stones.

- European Association for the Study of the Liver (EASL). EASL Clinical Practice Guidelines on the prevention, diagnosis and treatment of gallstones. J Hepatol 2016; 65:146.
- Warttig S, Ward S, Rogers G, Guideline Development Group. Diagnosis and management of gallstone disease: summary of NICE guidance. BMJ 2014; 349:g6241.