Berwick Colorectal & Surgical Specialists

GALLBLADDER MASS

What is a gallbladder mass?

A mass in the gallbladder. This may be either benign or malignant (cancer)

Anatomy and pathology

The gallbladder is in the right upper side of the abdomen. It is attached to the liver, storing, and concentrating bile. The liver makes bile, which is transported to the bowel by a system of tubes called bile ducts. Bile is a detergent which aids in the digestion of food and is transported into the bowel from the gallbladder by its connection to the bile duct (cystic duct).

Benign causes include adenomyomatosis and gallbladder polyps. Fortunately, gallbladder cancer is rare.

What are the signs and symptoms of a gallbladder mass?

If benign, occasionally patients may present with upper abdominal pain like biliary colic. In patients with cancer, they are often incidentally found on imaging or post-operatively following a gallbladder operation. If the disease is advanced patients or their relatives may notice their skin or eyes are yellow (jaundiced). Other symptoms include vague abdominal discomfort, nausea, lack of appetite or abdominal fullness. Patients may also notice they have lost weight.

What tests are required?

In addition to tests evaluating your kidney function and blood count, you will need to have liver function tests and tumour markers. Tumour markers are blood tests that are helpful if significantly abnormal but require interpretation in the current context. Unfortunately, if normal they are unhelpful and non-diagnostic. Additional blood tests may be requested to assist in ruling out benign causes such as inflammatory conditions.

The first imaging usually performed is an upper abdominal ultrasound. If a malignancy is suspected your surgeon will stage the disease and arrange a CT of your chest, abdomen, and pelvis. An MRI with contrast may also be arranged to assist with planning of any potential intervention.

Occasionally, additional interventions are required if the diagnosis remains elusive or biopsies are required for confirmation. These procedures can be performed endoscopically (camera in the mouth), radiologically (tubes performed by a doctor through the skin using a scan) or laparoscopically (keyhole). An additional reason to perform invasive procedures are to drain the bile duct by placing a stent to dilate the narrowing. This procedure can be performed conventionally either by endoscopy (ERCP) or radiologically (PTC). There is also an important emerging role for other endoscopic techniques (EUS).

What are the options of management?

Depends on whether the pathology is benign or malignant. If benign, surgery may be an option, depending on the pathology. This is performed by removing the gallbladder by a laparoscopic (keyhole) cholecystectomy. In the circumstances of the lesion potentially representing a small but pre-malignant lesion such as a polyp then close surveillance with ultrasound may be recommended instead.

In there is a concern for malignancy, your surgeon will present your case in a multi-disciplinary meeting for discussion. A multi-disciplinary meeting is a meeting of multiple experts from different specialties who review potential malignancies and formulate a decision that is both patient-centred and evidence-based. In the meeting the patients are discussed and in their absence their imaging and biopsies (if applicable) are reviewed. A consensus is reached, and the plan communicated to the patient by the treating doctor and the patient's general practitioner. Treatments provided are either with curative or palliative intent (symptom management). The treatment intent depends on patient factors (age, medical problems) and disease factors (stage of disease, liver function)

Curative treatment is surgical often in combination with systemic treatment (chemotherapy). Surgery may be performed either by an open approach or laparoscopically. The open approach is a large incision in the midline extending for 20-30 cm and then by a further 20-30 cm from an incision made at

right angles to the former. Surgery involves removing both the cancer and usually the lymph nodes (glands) surrounding the liver, aiming to achieve a cancer-free margin of normal surrounding tissue. Surgery may rarely involve removing part of your liver (hepatectomy) or bile duct. Chemotherapy may be required depending on the final pathology review after surgery (stage of the disease).

Palliative treatment is directed at controlling symptoms. If the patient is jaundiced the bile tube is stented and the patient referred to an Oncologist for consideration of palliative chemotherapy and a referral to palliative care doctors and nurses. Occasionally radiotherapy may be useful to assist with symptoms management.

What are the possible complications?

- Bile leak
- Major bleeding
- Infection
- Chyle leak (leak from lymphatic tissue)
- Incisional hernia

What to expect following your procedure?

All procedures require an overnight admission. You will wake from anaesthesia with dressings over dissolvable sutures. It is normal to experience pain from the procedure which is managed with painkillers. Occasionally, a drain is placed which is removed within 2 days if there is no bile present. You will be admitted to the intensive care for close monitoring. You will be encouraged to ambulate after surgery and will be discharged from hospital if you are tolerating a diet, your pain is controlled with painkillers, you are ambulating independently and in the absence of any complications.

The laparoscopic dressings should remain intact for four days. The dressing is waterproof to splashes only. After four days, remove them yourself. If you are concerned, see your general practitioner. The dressing for the open procedure should be left intact for one week, this dressing is also waterproof to splashes. Once removed, see your GP if you have any concerns.

Gentle exercises are encouraged. Avoid heavy lifting for 2-4 weeks. You may drive if you are able to put your foot on the brake in an emergency or have ceased taking any painkillers. Usually this occurs after 2 weeks.

Post-operative follow-up usually occurs in two-four weeks and will be arranged on discharge with your surgeon. Your surgeon will discuss and review the pathology specimen in the multi-disciplinary meeting. If chemotherapy is required, a referral will be made to the Oncologists and an appointment made. You will then undergo surveillance with blood tests and imaging after your surgery at regular intervals designed to detect if the cancer returns.