What are gallstones and what is cholecystitis?
The gallbladder is located on the right side of your abdomen just beneath the liver. It holds digestive fluids called bile (which is produced by the liver) that is released into your digestive system (small intestine) to help with the digestion of fatty foods.

Cholecystitis is inflammation of the gallbladder. In most cases cholecystitis is caused by gallstones that are blocking the tubes that lead out of the gallbladder into the small intestines. This causes the build-up of bile in the gallbladder, which in turn can cause inflammation. There are other causes of cholecystitis such as bile duct problems and tumours. Untreated cholecystitis can cause serious or life-threatening complications such as gallbladder ruptures. Cholecystitis can be acute or a chronic disease.

Gallstones (calculus of bile duct) are caused by substances in the bile that crystallise and form small stones of approximately 0.5cm (almost like sand or grain) or large stones (often only one very large stone) that can be up to 5cm in diameter.

Symptoms of gallstones and cholecystitis
Gallstones are present in approximately 8% of the population and many people have small gallstones without experiencing any symptoms. Only 10 – 20% of these people will develop symptoms.

The most common symptoms of gallstones and cholecystitis include:
- Sudden severe pain in the upper part of your right abdomen (biliary colic) just below the ribcage;
- Pain that radiates to your right shoulder or back;
- Pain that prevents you from breathing deeply;
- Tenderness of your abdomen when it is touched (palpitated);
- Pain that lasts 15 minutes to 24 hours. Pain that is continuous for 1 to 5 hours is a common occurrence; and/or
- Pain that start after meals, especially fatty meals, or that begin during the night and is so severe that it wakes you up.

In cases where there is already inflammation of the gall bladder (cholecystitis) these additional symptoms might occur:
- Nausea;
- Vomiting; and/or
- Fever

In cases where the bile duct (tube that lead to the small intestines) is blocked these additional symptoms might occur:
- Jaundice (yellowing of the skin and the white part of your eyes);
- Dark coloured urine;
- Light-coloured stools; and/or
- Fever and chills.

If you experience the above symptoms and are extremely uncomfortable it is best that you seek immediate medical attention.

Risk factors for gallstones and cholecystitis?
Risk factors for gallstones include a high fat, high sugar diet; obesity; lack of exercise; rapid weight loss; hormone replacement specifically oestrogen replacement; diabetes mellitus; high cholesterol and high blood pressure. Gallstones and cholecystitis are both more frequent in women than in men.
How are gallstones and cholecystitis diagnosed?
The following tests may be performed to diagnose gallbladder stones and cholecystitis:

- Abdominal ultrasound: An ultrasound is a noninvasive test in which a probe on the skin bounces high-frequency sound waves off structures in the belly. Ultrasound is an excellent test for gallstones and to check the gallbladder wall.
- HIDA scan (cholescintigraphy) / Gallbladder scan: This is a nuclear medicine test during which a radioactive tracer (like a dye) is injected into a vein in your arm (intravenously) and is secreted into the bile. Cholecystitis is likely if the radioactive tracer is not seen in the gallbladder.
- Endoscopic retrograde cholangiopancreatography (ERCP): A flexible tube is inserted through the mouth, through the stomach, and into the small intestine, a doctor can see through the tube and inject dye into the bile system ducts. Tiny surgical tools can be used to treat some gallstone conditions during ERCP.
- Magnetic resonance cholangiopancreatography (MRCP): An MRI scan takes images of the bile ducts, pancreas, and gallbladder. MRCP images help guide further tests and treatments.
- Abdominal X-ray: Although they may be used to look for other problems in the abdomen, X-rays generally cannot diagnose gallbladder disease. However, X-rays may be able to detect gallstones.
- Blood tests: A full blood count (FBC) and liver function tests may assist the doctor to verify if your symptoms are caused by a condition other than gallstones.

Treatment of gallstones and cholecystitis
If you are diagnosed with gallstones but do not have any symptoms it is not necessary to receive any specific treatment.

If you have symptoms for the first time you and your doctor may decide that the best decision is to wait and see if your symptoms go away on their own (watchful waiting). It is usually safe to wait until you have had another attack before you consider having surgery. Watchful waiting is however only safe if:

- This is your first episode of gallstone pain
- The pain is mild. If you have severe pain, surgery may be considered to prevent future attacks and possible complications
- You do not have any complications such as a blocked bile duct
- You are not at high risk for future problems

In most cases however the treatment for gallstones and cholecystitis is surgery. Open surgery where the doctor makes an incision in the abdomen is lately only used in very complicated cases. Most surgery is laparoscopic, in other words the doctor makes 3 to 4 small cuts (5-10mm each) in the abdomen and insert instrumentation through these openings. The gallbladder and gallstones are then removed into a retrieval bag or pouch.

Medical management in the form of a drug which helps to prevent the formation of gallstones and that also decreases the size of some gallstones is available. However, there is no significant evidence that the drug is effective in the long term. The lack of long-term effectiveness of the drug and the recurrence of most episodes of gallstones and/or cholecystitis eventually lead to surgical intervention.

What must be funded under PMB level of care?
PMB level of care may never be less than the diagnostic tests, treatment and care offered by the state sector.

Gallstones and cholecystitis are included in the PMB regulations in the following categories:
- Calculus of bile duct with cholecystitis
- Gallstone with cholecystitis and/or jaundice

The inclusion in the PMB regulations means that the medical scheme is compelled to fund the diagnosis, treatment and care of the conditions.

It is important to note that gallstones are only included in the PMB regulations if there is confirmed cholecystitis and/or jaundice. If only gallstones are diagnosed the condition is not included in the PMB regulations.

The diagnostic tests that are included in the PMB regulations include the list below. It is however important that you find out if your medical scheme has specific protocols for the specific test that is requested by your doctor.

- Abdominal ultrasound
- Endoscopic retrograde cholangiopancreatography (ERCP) – medical schemes may have specific criteria that will determine when this test will be funded. The medical scheme may further request a motivation from the treating doctor to verify if the test meet the criteria of the scheme
- Magnetic resonance cholangiopancreatography (MRCP) – medical schemes may have specific criteria that will determine when this test will be funded. The medical scheme may further request a motivation from the treating doctor to verify if the test meets the criteria of the scheme
- Abdominal X-ray
- Blood tests

The treatment component is specified as medical management; cholecystectomy; other open or closed surgery. Closed surgery is laparoscopic surgery. Medical schemes may not have rules that exclude laparoscopic surgery if you suffer from gallstones and cholecystitis.

Care after your initial treatment will include lifestyle changes, for example a low fat, low sugar content diet. If your doctor refers you to a dietician to assist you with a diet plan, this should be funded as PMB level of care as well.

References:

WHAT ARE PRESCRIBED MINIMUM BENEFITS?

Prescribed Minimum Benefits (PMBs) are defined by law. They are the minimum level of diagnosis, treatment, and care that your medical scheme must cover – and it must pay for your PMB condition/s from its risk pool and in full. There are medical interventions available over and above those prescribed for PMB conditions but your scheme may choose not to pay for them. A designated service provider (DSP) is a healthcare provider (e.g. doctor, pharmacist, hospital) that is your medical scheme’s first choice when you need treatment or care for a PMB condition. You can use a non-DSP voluntarily or involuntarily but be aware that when you choose to use a non-DSP, you may have to pay a portion of the bill as a co-payment. PMBs include 270 serious health conditions, any emergency condition, and 25 chronic diseases; they can be found on our website.

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