

# **Primary Sclerosing Cholangitis**

## What Is Primary Sclerosing Cholangitis (Psc)?

Primary sclerosing cholangitis (PSC) is a chronic liver disease that affects the bile ducts, both inside and outside the liver. The bile ducts carry bile from the liver to the gallbladder and intestines, where it helps digest fats. In people with PSC, inflammation causes the bile ducts to become scarred and narrowed, leading to blockages. Over time, these blockages can cause bile to build up in the liver, resulting in liver damage, cirrhosis (scarring of the liver), and ultimately liver failure. PSC is a progressive disease, meaning it tends to worsen over time, but the rate of progression can vary greatly between individuals.

## **Symptoms Of Primary Sclerosing Cholangitis**

Many people with PSC do not experience symptoms early in the disease. However, as the condition progresses, symptoms may begin to develop. Common symptoms of PSC include:

- **Fatigue**: Persistent tiredness is a common symptom.
- **Jaundice**: Yellowing of the skin and eyes caused by a buildup of bile in the liver.
- Itchy skin (pruritus): Itching caused by the accumulation of bile acids in the skin.
- **Abdominal pain**: Often in the upper right side of the abdomen.
- **Fever and chills**: Indicating possible infection in the bile ducts (cholangitis).
- **Unintended weight loss**: A result of malabsorption or loss of appetite.

PSC is often associated with inflammatory bowel disease (IBD), particularly ulcerative colitis, though the exact cause of PSC is not fully understood. Many people with PSC also have ulcerative colitis or Crohn's disease, though it is not always present.

## **Causes Of Primary Sclerosing Cholangitis**

The exact cause of PSC is unknown. It is believed to be an autoimmune disease, where the body's immune system mistakenly attacks its own cells—in this case, the cells of the bile ducts. Genetic factors may also play a role, as PSC tends to run in families. Environmental factors, such as infections, may trigger or exacerbate the disease in some individuals.



#### **Complications Of Primary Sclerosing Cholangitis**

PSC can lead to several serious complications, including:

- Cholangitis: Infections of the bile ducts can occur due to blockages and poor bile flow.
- **Cirrhosis**: Scarring of the liver that impairs its function.
- Liver failure: The liver may eventually lose its ability to function properly.
- **Bile duct cancer (cholangiocarcinoma)**: People with PSC have an increased risk of developing cancer of the bile ducts.
- Gallbladder cancer: The risk of gallbladder cancer is also higher in individuals with PSC.
- Colon cancer: Individuals with PSC and inflammatory bowel disease have an increased risk of colon cancer.

## **Diagnosing Primary Sclerosing Cholangitis**

PSC is typically diagnosed through a combination of blood tests and imaging studies. Diagnostic methods include:

- **Blood tests**: These tests can show elevated levels of liver enzymes, which indicate liver damage.
- Magnetic resonance cholangiopancreatography (MRCP): This imaging test uses MRI technology to create detailed images of the bile ducts and can help detect narrowing or blockages.
- **Liver biopsy**: A small sample of liver tissue may be taken to confirm the diagnosis and assess the extent of liver damage.

#### **Treatment Options For Primary Sclerosing Cholangitis**

There is currently no cure for PSC, and treatment focuses on managing symptoms, preventing complications, and monitoring disease progression. Treatment options include:



- Medications: Ursodeoxycholic acid (UDCA) may be prescribed to help improve bile flow, although
  its long-term benefits are debated. Antibiotics may also be used to treat infections of the bile ducts
  (cholangitis).
- **Endoscopic treatment**: Procedures such as endoscopic retrograde cholangiopancreatography (ERCP) may be used to open narrowed bile ducts and improve bile flow.
- **Liver transplant**: In advanced cases, where liver function is severely impaired or the patient develops liver failure, a liver transplant may be necessary.

#### **Lifestyle Changes For Psc**

People with PSC can benefit from certain lifestyle changes to help manage their condition and support liver health. These include:

- Dietary adjustments: Eating a healthy diet low in fat and alcohol can help reduce strain on the liver.
- Regular monitoring: Routine check-ups with your healthcare provider are essential for tracking disease progression and managing symptoms.
- Managing associated conditions: Individuals with inflammatory bowel disease should work closely with their doctor to manage both PSC and IBD symptoms.

### Why Choose Birmingham Liver Clinic?

At Birmingham Liver Clinic, we offer expert, compassionate care for patients with primary sclerosing cholangitis. Our team of HPB surgeons and liver specialists provides comprehensive care, from diagnosis through to treatment. With access to advanced diagnostics and a multidisciplinary team, we ensure that each patient receives personalised, state-of-the-art care for PSC.

#### **Contact Us**

If you have been diagnosed with primary sclerosing cholangitis or are experiencing symptoms related to bile duct or liver disease, contact Birmingham Liver Clinic today to schedule a consultation. Our team of experts is dedicated to helping you manage your condition and improve your quality of life.