Beyond tired: Understanding fatigue in Primary Biliary Cholangitis

Understanding fatigue

- Fatigue is a distinct and debilitating condition that can have a significant impact on quality of life[1]
- It often accompanies serious autoimmune diseases such as primary biliary cholangitis (PBC), lupus, multiple sclerosis, and other chronic inflammatory conditions[2]
- While tiredness can often be relieved by rest or sleep, fatigue is a chronic condition that isn't improved by rest[1]
- Fatigue is persistent, overwhelming and not proportional to activity. It affects physical, emotional, and mental functioning, often interfering with daily life[2]

> *"Fatigue is so different to being tired, I can't get out of bed...it is life changing."*
>
> – Wendy, living with PBC

ABOUT PBC

PBC is a rare, progressive, autoimmune, cholestatic liver disease with prevalence increasing globally[3]

Autoimmune means that in people with PBC, a type of white blood cell found in the body attacks and gradually destroys the liver's small bile ducts[3]

Bile ducts are tiny tubes in the liver that help carry bile, a fluid containing bile acids which breaks down fats and helps remove waste from the body[4]

When the bile ducts are damaged, bile can't flow properly and starts to build up in the liver which causes stress and damage to liver cells[3]

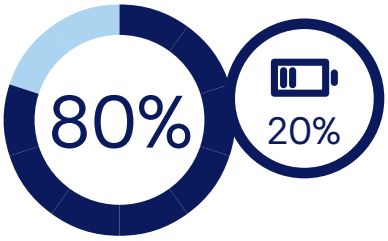
Over time, the liver gets scarred (fibrosis), and if it keeps getting worse, it can lead to cirrhosis (serious liver damage) and even liver failure[3]

MOST COMMON SYMPTOMS OF PBC[3]

fatigue

pruritus (itching)

Fatigue is a common and debilitating symptom of PBC



Fatigue affects up to 80% of people with PBC,[5] with up to 20% experiencing severe fatigue.*[6]

Fatigue is a measurable** and clinically significant condition in PBC.[7]

Fatigue is not simply a secondary effect of other symptoms such as pruritus.

While pruritus can contribute to the experience of fatigue, research shows the two symptoms are only weakly correlated,[7] indicating separate mechanisms are involved.

This suggests that fatigue can improve independently with targeted intervention, reinforcing its status as a treatable condition.

Fatigue in PBC is not linked to disease stage or extent of liver damage[8] and can even persist following liver transplant.[9]

Studies show up to 37% of people with PBC continue to experience fatigue post-liver transplant, making it a condition that requires its own focus.[9]

*Severe fatigue refers to a significant cause of quality of life impairment[11]
**Fatigue is assessed using validated patient-reported outcome tools[1]

While fatigue is common among people living with PBC, there is now evidence that some treatments for PBC may improve fatigue.[7,10]

Uncovering the science of fatigue in PBC

Advanced brain imaging techniques are showing changes in brain activity and connectivity associated with fatigue in people living with PBC.[12]

Recent research suggests that fatigue in PBC is linked to disrupted communication between brain areas involved in motor control, sensory processing and emotional regulation.[12]

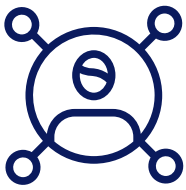
A daily struggle that touches every part of life

Fatigue can have a range of physical, emotional, and cognitive impacts that can deeply disrupt quality of life:

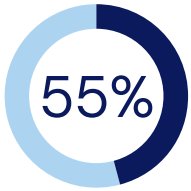
Physical impact
Limits movement and daily function[13]

Cognitive impact
Disrupts sleep quality, memory and focus[14]

Emotional impact
Anxiety, depression, isolation[15]



Social impact
Strained relationships and difficulty maintaining employment[16]



Up to 55% of people living with PBC with severe fatigue experience clinically significant cognitive symptoms.[14]

Fewer than 20% people living with PBC with severe fatigue are able to work.[16]

Far reaching impact of fatigue

Fatigue is not just a symptom – it's an all-encompassing and far-reaching burden that has ripple effects that extend far beyond the individual.

It often shifts daily responsibilities onto family and caregivers, leading to emotional distress and financial strain.[17,18]

It can also contribute to reduced workforce participation and early retirement.[19,20]

> *"Sometimes it's difficult to get through a day at work... and then it impacts your social life... even speaking can be an effort when you're struggling with fatigue."*
>
> – Jo, living with PBC

60%

Up to 60% of people with PBC report a loss in work productivity due to the disease.[19]

As symptom impact progresses, many people are unable to afford the care they need for their long-term, or chronic conditions, such as PBC. This in turn may result in friends and family providing free care which could lead to loss of work and wages.[17,18]

Fatigue remains unaddressed

Despite its prevalence and impact, fatigue remains undermanaged and often overlooked in clinical care.[8]

While validated tools and clinical thresholds exist to track fatigue, they are not consistently implemented in practice,[21] resulting in missed opportunities for management.

New era in PBC fatigue management

There is a critical need for improved recognition, routine measurement and open communication around fatigue in PBC, not just as a symptom, but as a core condition that significantly impacts quality of life.

Treatment must go beyond liver biochemistry and address both disease progression and the burden of symptoms, like fatigue – healthcare professionals should see and treat the whole person, not just the liver disease.

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