touch™ ENDOCRINOLOGY

Navigating the management of cholestatic pruritus in patients with PBC: Insights from the multidisciplinary team

Practice aid for cholestatic pruritus in PBC

For more information, visit: www.touchENDOCRINOLOGY.com

Burden of cholestatic pruritus in patients with PBC

- Occurs in up to **81% of patients** and may persist **chronically in at least 35%**[1]
- Intensity of itch is **often worse at night**, causing **sleep deprivation, exhaustion** and **fatigue**[1,2]
- Pruritus shows inter-and intra-individual variation and is **not linked to PBC stage or severity**[1,2]
- Itch can have a **significantly detrimental effect on QoL** and can lead to suicidal ideation[1,3]
- **No primary lesions or primary rash,** though may see secondary lesions, e.g. excoriations, lichenification, prurigo nodules and scarring[1,2]
- Female patients report **more intense** pruritus **during hormonal changes,** e.g. the luteal phase of the menstrual cycle, during pregnancy or when taking HRT[1,2]

Basic assessment of itch in PBC[2]

Patients may not associate itching with their PBC, so **may not proactively report their symptoms**
Cholestatic pruritus should, therefore, be assessed at the time of diagnosis and at all follow-up visits

Factors to assess include:

- Intensity of itch
- Time of start
- Duration of itch
- Localization of itch
- Triggering factors
- Relieving factors
- Patient's opinion on the origin of itch
- Burden of itch
- Clinical examination of the entire skin to screen for primary and secondary skin lesions
- Physical examination to rule out other pathologies that may be responsible for cholestatic pruritus

Patients may find it useful to **keep a record of pruritic activity in the form of a diary or in a digital format** that can be assessed together with their clinician at follow-up visits

touch™ ENDOCRINOLOGY

Tools for assessing itch in PBC

NRS: **intensity** of itching is ranked from 0 (no itch) to 10 (worst itch imaginable)[4,5]

VAS: **intensity** of itching marked on a 10 cm ruler (0=no itch; 10=worst itch imaginable)[4]

Commonly used to measure pruritus at time of assessment or the worst pruritus in the previous 24 hours[4]

PGI-S: **severity** of itching at that time point is ranked from 1 (not present) to 7 (extremely severe)[6,7]

PGI-C: **change in severity** of itching since baseline is ranked from 1 (very much improved) to 7 (very much worse)[6,7]

5-D itch scale: five domains include **degree (severity)**, duration, direction, **disability** and distribution.[7–9] First four domains measured on a 5-point Likert scale; 'distribution' includes 16 potential locations[9]

PBC-40: assesses **HRQoL** of patients with PBC with 40 questions over six domains (one of which is itch). Itch domain includes three questions to assess impact of itch over the last 4 weeks rated on a 5-point scale (never, rarely, sometimes, most of the time, always)[10]

Treatment of cholestatic pruritus in PBC

EASL 2017 guideline recommendations[11]

Line of treatment	Agent	MoA	Approval
First-line	**Cholestyramine**	Bile acid sequestrant and anion exchange resin[2,11,12]	**Yes**[2,12]
Second-line	**Rifampicin/ rifampin**[13]	Antibiotic[12,14]	*Off-label*[2,12]
Third-line	**Naltrexone** or **nalmefene**	μ-opioid receptor antagonists[2,11,12]	*Off-label*[2,12]
Subsequent lines in unresponsive disease	**Sertraline**	SSRI	*Off-label*[2,12]
	Gabapentin	Anticonvulsant[15]	*Off-label*[2]

Liver transplantation when pruritus is 'persistent and intractable' after therapeutic trials[11]

Japanese 2014 guideline recommendations[14]

Line of treatment	Agent
First-line	**Cholestyramine**
Subsequent lines	**Rifampicin/rifampin**[13]

Japanese approvals post-2014 guidelines[2,12]

Agent	MoA
Nalfurafine	κ-opioid receptor agonist

touch™ ENDOCRINOLOGY

Practical tips for managing cholestatic pruritus

Patients should **receive education on pruritus as a symptom of PBC** as well as being advised on general **pruritus-relieving measures**[2]

Avoid skin dryness/irritation

- X **Heat,** e.g. heavy or heat-retaining bedclothes[2,17]
- X Frequent (more than once a day) **washing with hot water**[2,17]
- X **Extensive rubbing** of the skin after showering[2]
- X Contact with possible **irritants,** e.g. tea tree oil/chamomile[2]
- X Overly **scented detergents**[2]
- X **Tight clothing** or clothes made of animal wool[2,16]
- X Consumption of large amounts of **hot and/or spicy food**, **hot drinks** or **alcohol**[2]

Protect the skin and decrease pruritic activity

- ✓ Wash with **cold or lukewarm water**[2,11,16,17]
- ✓ Use **mild/non-alkaline soaps and oils** that do not produce a lather[2,17]
- ✓ Use **topical emollients** with cooling and/or anaesthetic effects (e.g. emollients containing **1–2% menthol or polidocanol**)[2,11,16,17]
- ✓ Wear **soft, breathable clothing**[2,17]
- ✓ Keep **nails short** to avoid skin damage[2,17]
- ✓ Try **patting** rather than scratching/rubbing[17]
- ✓ **Manage stress**[17]

Some patients may benefit from relaxation techniques or psychological interventions for coping with the itch-scratch cycle[2]

Collaborating to support patients with PBC and cholestatic pruritus

- To improve disease outcomes, facilitate treatment adherence and increase patient QoL, **proactive pruritus management strategies should be implemented, including patient education and counselling**[18]
- Pruritus in PBC is subjective and carries individual threshold variations, therefore, **a comprehensive approach** to care is required.[18] Management of patients with cholestatic pruritus should go beyond symptom monitoring and assume a **patient-centric attitude to all symptom management**[18]
- Signposting patients to **patient support groups** such as the **PBC foundation**, or other national organizations can help them find support materials to help them in their daily lives[19]

Insights from a patient advocate

*"The itch in particular is very difficult to treat for many people, so I think **having the facility to listen to other patients, as well as doctors is very helpful**."*[20]

*"**Your hepatologist is your partner**, you make decisions together, you discuss things together."*[20]

touch™ ENDOCRINOLOGY

Abbreviations and references

Abbreviations

EASL, European Association for the Study of the Liver; HRQoL, health-related QoL; HRT, hormone replacement therapy; MoA, mode of action; NRS, numerical rating scale; PBC, primary biliary cholangitis; PGI, Patient Global Impression; PGI-C, PGI-change; PGI-S, PGI-severity; QoL, quality of life; SSRI, selective serotonin reuptake inhibitor; VAS, visual analogue scale.

References

1. Jones D, et al. *Eur Med J Hepatol*. 2023;11:24–33.
2. Düll MM, Kremer AE. *Clin Liver Dis*. 2022;26:727–45.
3. Patel SP, et al. *J Am Acad Dermatol*. 2019;81:1371–8.
4. Pereira MP, Ständer S. *Itch*. 2019;4:e29.
5. von Maltzahn R, et al. *J Patient Rep Outcomes*. 2024;8:60. doi: 10.1186/s41687-024-00722-y [published online ahead of print].
6. Byrom B, et al. *J Rehabil Assist Technol Eng*. 2020;7:2055668319892778.
7. Vernon M, et al. *J Am Acad Dermatol*. 2021;84:1132–4.
8. Hegade VS, at al. *Frontline Gastroenterol*. 2016;7:158–66.
9. Elman S, et al. *Br J Dermatol*. 2010;162:587–93.
10. Jacoby A, et al. *Gut*. 2005;54:1622–9.
11. EASL. *J Hepatol*. 2017;67:145–72.
12. Smith HT, et al. *Dig Dis Sci*. 2023;68:2710–30.
13. Beloor Suresh A, et al. 2023. Available at: https://www.ncbi.nlm.nih.gov/books/NBK557488/ (accessed 16 September 2024).
14. Working Subgroup for Clinical Practice Guidelines for Primary Biliary Cirrhosis. *Hepatol Res*. 2014;44(Suppl.S1):71–90.
15. Yasaei R, et al. 2024. Available at: www.ncbi.nlm.nih.gov/books/NBK493228/ (accessed 16 September 2024).
16. Lindor KD, et al. *Hepatology*. 2019;69:394–419.
17. Primary Care Dermatology Society. Available at: www.pcds.org.uk/patient-info-leaflets/itch-pruritus-without-a-rash (accessed 16 September 2024).
18. Pate J, et al. *BMJ Open Gastroenterol*. 2019;6:e000256.
19. PBC Foundation. Available at: www.pbcfoundation.org.uk/wp-content/uploads/2023/08/HealthcarePractitionerLeafletJanuary2018.pdf (accessed 16 September 2024).
20. Data on File. touchIME, August 2024.