



# The Annenberg Academy for Team-Based Care

## Interprofessional Care of Patients with Pruritus Associated with Primary Biliary Cholangitis

### MANAGING PATIENTS WITH CHOLESTATIC PRURITUS ASSOCIATED WITH PRIMARY BILIARY CHOLANGITIS: KEY CONCEPTS

Primary biliary cholangitis (PBC) is a chronic, autoimmune cholestatic disease with a prevalence of 41 per 100,000 population.<sup>1-4</sup> Approximately 80% to 90% of patients with PBC self-report pruritus, with 30% to 50% reporting pruritus as moderate to severe.<sup>5-8</sup> The non-specific symptoms of PBC early in its course typically results in disease progression without diagnosis or treatment. Recent data shows an average delay from initial symptom onset or abnormal alkaline phosphatase level to diagnosis of PBC of more than 3 years, and time between positive antimitochondrial antibody and PBC diagnosis of 94 days.<sup>9</sup> Guideline recommendations for the management of patients with PBC were published by the American Association for the Study of Liver Diseases in 2021.<sup>10</sup>

Key concepts to keep in mind when managing patients with cholestatic pruritus associated with primary biliary cholangitis are:

- Pruritus associated with PBC can be severe and unrelenting and does not typically respond to many conventional treatments for PBC.<sup>8,11,12</sup>
- Identifying patients with pruritus and evaluating the severity of itch using validated tools, such as the Primary Biliary Cholangitis-40, is essential for monitoring and advancing treatment to help patients reach identified goals.<sup>13</sup>
- Treatment of the underlying PBC is a key treatment goal.<sup>10,14</sup>
- Patient education about general measures for itch relief, importance of monitoring for signs of infection, and treatment expectations is important.
- While not approved by the US Food and Drug Administration to treat pruritus associated with PBC, the peroxisome proliferator-activated receptor (PPAR) agonists elafibranor and seladelpar have been shown to improve itch-related outcomes as secondary endpoints in clinical trials.<sup>6,7</sup>
  - Patients using elafibranor or seladelpar should be monitored for liver injury and possible fracture risk.<sup>6,7</sup>
  - Patients taking elafibranor also should be monitored for increased myalgia and elevated creatine phosphokinase.<sup>6</sup>

- Phase 2 and 3 trials of investigational ileal bile acid transport (IBAT) inhibitors show promise in relieving itch in patients with PBC.<sup>15-17</sup> The main side effect of IBAT inhibitors is diarrhea.<sup>18</sup>
- Various non-pharmacologic approaches have been utilized; liver transplantation should be considered only when all other measures have failed.
- Collaboration among medical professionals is key to helping patients realize their goals related to pruritus associated with PBC.

### INTERPROFESSIONAL COLLABORATION PRINCIPLES

For the evolution in treatment to be of optimal benefit to patients, comprehensive strategies for choosing, delivering, monitoring, and modifying therapy have become especially important. As a consequence, care is typically provided by an interprofessional, multidisciplinary care team that extends beyond physicians to include nurses, nurse practitioners, pharmacists, physician associates, social workers, and others, often involving collaboration between providers in community and academic settings.

To that end, the following reflects a conversation among 3 healthcare professionals about interprofessional care and how collaborative practices and teams can strengthen our health systems.

**Christopher Flores, MD:** In medical school, I was taught that the patient-doctor relationship was the most critical and important dynamic in healthcare. But after 30-plus years in clinical care, I can attest that healthcare is a team sport and we deliver care in teams of individuals with different training, different skills, different talents. And we teach each other, we learn from each other, we brainstorm and solve problems to meet the needs of the patient.

I want to make a point that interprofessional refers to clinicians in different professions, such as nurses, nurse practitioners, pharmacists, physicians, and physician associates. Multidisciplinary refers to clinicians in different specialties or sub-specialties, such as cardiology, dermatology, and oncology. LaTosha, do you want to talk about interprofessional collaboration?

**LaTosha Mollette, DNP:** The World Health Organization defines interprofessional collaboration as when multiple healthcare workers from various backgrounds work together with patients, families, and communities to provide the best healthcare possible.<sup>19</sup> This is exactly what teamwork should



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look like, but it is important to remember that healthcare teams can vary from patient to patient.

I work in a rural setting, working together with various healthcare professionals to improve access to needed healthcare services, which helps to prevent unnecessary delays in care and treatment. Ultimately, working together as a team helps to meet the needs of others to improve health outcomes, patient care, and safety.

**Christopher Flores, MD:** I think all of us in healthcare are trying to figure out how to do things better, make life easier for ourselves, and make everybody happier, patients, our staff, and ourselves, to make things more sustainable. Interprofessional collaboration can accomplish this. There's a growing body of literature that shows that interprofessional collaboration can improve patient outcomes, acceptance of treatment, and satisfaction.<sup>20-23</sup> It can decrease costs, improve efficiency, reduce disparities, improve health equity, and make things more sustainable for providers.<sup>20,24-31</sup>

The Interprofessional Education Collaborative has identified 4 behavioral competencies for effective interprofessional collaboration: 1) roles and responsibilities; 2) values and ethics; 3) communication; and 4) teams and teamwork.<sup>32</sup> Michael, do you want to talk a little bit about the roles and responsibilities?

**Michael Smith, PharmD:** Certainly, it's one of these things that we don't often think about, but it's important for 2 reasons. One, understanding our own responsibility and roles that we have within our team and what our teammates can expect from us in terms of what we can deliver to them and deliver to patients.<sup>32</sup> The other is understanding what your team can do for you as well, so that you understand their educational background and you can help them practice at the top of their license by utilizing their skillset to the fullest extent.

It is increasingly common for clinicians, even those within a profession, to take different educational and practice paths leading to clinical practice. As an example, there are various differences in training a pharmacist. Nowadays, all pharmacists graduate with a Doctor of Pharmacy degree (PharmD), but some of us have done 1 or 2 years of residency training or postdoc fellowships. So, getting to know your teammates and what you can expect from them and what

they can expect from you can really help your team function at a high level.

**Christopher Flores, MD:** We talk about values and ethics as well.<sup>32</sup> In medicine, we're constantly required to make very difficult and complicated treatment decisions for our patients. We really are missing a great opportunity if we don't involve the opinions of all the members of our team. What does the nurse think about this plan or what does the social worker who has talked to the family members think about this plan? Or what does the physical therapist think, who has been working with the patient for the last 3 days? LaTosha, what do you think about communication?

**LaTosha Mollette, DNP:** Communication is essential in everything we do, and it's how we're able to effectively achieve goals, as well as improve relationships and interactions with others.<sup>32</sup> The healthcare system is often described as being fragmented with little communication and collaboration, but when healthcare professionals communicate responsibly and respectfully, this allows them to overcome differences and work together to accomplish a shared goal, including learning from each other, to better improve patient outcomes and safety.<sup>25,33-35</sup>

**Christopher Flores, MD:** We're talking a lot about teams and teamwork. Michael, do you have any other points you want to make about teamwork?

**Michael Smith, PharmD:** Most of us are members of various teams during the course of a typical day. Think about the team members that you work with to take care of patients, but also think about a team from a networking standpoint. Do you have a network of like colleagues? As an example, other pharmacists in our healthcare system may reach out to me for advice about a patient with pain, whether or not I'm actually seeing the patient. We can make our team small, we can make them big, but we should be making our teams in ways that everybody's functioning at a high level and putting the patient at the center of the team.

**Christopher Flores, MD:** Michael, LaTosha talked about the fragmented healthcare system and how interprofessional collaboration can help with that. Do you have any examples from your experience?

**Michael Smith, PharmD:** Think about the patient's experience through our healthcare system. Even if a patient receives all of their healthcare within 1 system, they often have to travel



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to many different places just to access care. From a primary care clinic to a hospital, to a specialty clinic, to a pharmacy. We can fill these gaps by using our interprofessional framework, our education, and allowing our collaborative practice teammates to step in and fill that.

**Christopher Flores, MD:** In conclusion, I just want to summarize that medicine is a team sport and that there is a growing body of evidence that supports the various benefits of interprofessional collaboration. LaTosha, Michael, do you have any final thoughts?

**LaTosha Mollette, DNP:** I think just being willing to change is crucial. I think sometimes we have become complacent in clinical practice, but our healthcare system is ever evolving. So, learning how to be a team player always benefits everyone involved.

**Michael Smith, PharmD:** I've learned a great deal from my interprofessional colleagues, and I hope that I've helped them learn as well, with the ultimate goal of really improving patient care.

### INTERPROFESSIONAL COLLABORATION FOR PATIENTS WITH PRURITUS ASSOCIATED WITH PRIMARY BILIARY CHOLANGITIS

Patients with PBC experience a significantly diminished quality of life, largely due to pruritus and fatigue. Consequently, treating both symptoms of PBC, as well as the liver complications, is best undertaken by an interprofessional, multidisciplinary team.<sup>36,37</sup> One recent report cited that care provided to patients with cirrhosis by an interprofessional, multidisciplinary team consisting of a nurse practitioner, nurse, dietitian, social worker, addiction counsellor, pharmacist, and on-demand hepatologist reduced inpatient and emergency department visits over approximately one year by 83% and 80%, respectively.<sup>37</sup>

Adherence to evidence-based guidelines also may be improved. Based on the findings of a retrospective analysis of the UK National Health Service showing critical shortfalls in the care delivered to patients with PBC,<sup>38</sup> Smith and colleagues developed an intervention to improve care.<sup>39</sup> The intervention consisted of a PBC care bundle that included a checklist of treatment options, symptom assessment and management, and disease staging, as well as a concise summary of treatment guidelines to serve as a quick reference tool. The care bundle recommended interprofessional support to optimize patient care.<sup>39</sup> Pruritus

and fatigue were included in the symptom assessment and management section of the checklist, with first- and second-line treatment strategies were described in the guidelines section. Compared to care included in the retrospective analysis,<sup>38</sup> use of the checklist by the interprofessional, multidisciplinary care team over a 6-month period showed that adherence to guidelines increased across numerous quality standards, such as:

- First-line treatment with UDCA or documented intolerance
- Optimal UDCA dose
- Referral for second-line therapy
- Assessment of fatigue within the last 24 months
- Assessment of pruritus within the last 24 months
- Bone health assessment within the last 5 years
- Surveillance for hepatocellular carcinoma in patients with cirrhosis

Assessment of pruritus increased from 61.3% to 91.3% and fatigue from 54.3% to 90.4%.

Other investigators also have found benefits with care provided by an interprofessional, multidisciplinary team to patients with advanced liver disease. Care was provided at 3 U.S. Veterans Health Administration health systems.<sup>40</sup> Although care varied by health system, it was provided using an integrated model that incorporated elements of curative care, symptom management and supportive care, advance care planning, and end-of-life services by an interprofessional, multidisciplinary care team (**Table**). While care provided by the interprofessional, multidisciplinary team was viewed to provide benefits to patients and clinicians, clinicians viewed care as optimal when team members were co-located in the same clinic as this enabled the delivery of synchronous rather than sequential care. Moreover, the co-located clinic encouraged formal collaboration often through informal conversations. The synchronous timing of care was particularly important when patients required transitioning from life-prolonging care to palliative care. Limitations to interprofessional, multidisciplinary care were identified, however, including a high degree of teamwork and schedule coordination and physical space limitations. One of the three sites utilized a weekly, interprofessional, multidisciplinary care team case conference as an alternative approach to co-located team members. The case conference was found to facilitate the development of an executable care plan for individual patients discussed at the conference.



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**Table.** Interprofessional, multidisciplinary care team members and their roles for integrated advanced liver disease.

| Profession/Specialty   | Role  |
|--|---|
| Gastroenterology/Hepatology (physician, physician associate, nurse practitioner) | <ul style="list-style-type: none"> <li>Leads diagnosis and long-term management</li> <li>Coordinates emergency protocols</li> </ul>   |
| Behavioral health (Psychiatrist, psychologist, therapist, chaplain)              | <ul style="list-style-type: none"> <li>Addresses psychological and psychosocial issues</li> <li>Enhances access to addiction and substance abuse care</li> <li>Provides spiritual/Supplemental support</li> </ul> |
| Social worker  | <ul style="list-style-type: none"> <li>Helps navigate complex system</li> <li>Facilitates connections between patients and family members</li> </ul>  |
| Dietitian  | <ul style="list-style-type: none"> <li>Provides nutritional support</li> </ul>  |
| Physical therapist   | <ul style="list-style-type: none"> <li>Assists with physical concerns, fatigue, mobility, frailty</li> </ul>  |
| Pharmacist   | <ul style="list-style-type: none"> <li>Helps avoid drug interactions and adverse events</li> <li>Provides patient education</li> <li>Improves medication adherence</li> </ul>                                     |
| Case manager   | <ul style="list-style-type: none"> <li>Point of contact for patients to facilitate access to services</li> </ul>  |

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