Psoriatic Arthritis Can Decimate Quality of Life

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The physical, economic, and social impact of psoriatic arthritis (PsA) can take an emotional toll on patients. Meanwhile, as the array of treatments available for PsA increases, so does the importance of establishing a consensus regarding key clinical trial outcomes.

A survey answered by 1,700 patients from 16 countries showed that many patients with PsA cannot undertake everyday activities that would allow them to lead a “normal” life. Dr. Strand and colleagues grouped patients who said they had been happy “all” or “most” of the time during the previous week into a “happy” cohort; patients who answered “a little” or “none” to this question were defined as “not happy.” Considering physicians’ and patients’ perceptions of health status and clinical characteristics, the unhappy group had worse health outcomes (in terms of pain, afflicted joint counts, and Psoriasis Area and Severity Index scores). Additionally, only 56.9% of patients in the unhappy group reported satisfaction with their current treatment versus 83% in the happy group (P < 0.001).

Researchers were studying how patients in the real world report the impact of their disease, Dr. Strand said. “We know that it impacts their ability to work, and whether they work within or outside the home. Many patients take lower-paying jobs because they want to work, but they know that they can’t do as much as they would like to. Psoriatic arthritis also impacts social, family, and leisure activities. Proactively treating PsA to reduce severity should improve important components of health-related quality of life.”

A similar survey involving nearly 1,500 patients with PsA assessed the relationship between physical functioning and work. Greater disease severity correlated with worse physical function in terms of higher Health Assessment Questionnaire Disability Index (HAQ-DI) scores (P < 0.0001). As HAQ-DI scores increased, so did unemployment and retirement due to PsA (P < 0.0001).

In employed patients, the percentage of work time missed due to PsA significantly rose as HAQ-DI scores climbed, as did patients’ percentage of impairment while working and overall work impairment. This study’s findings suggest that strategies to reduce disability in patients with PsA will not only benefit patients, but also bring a positive societal and economic impact, she said.

In a Danish cohort study, Dr. Strand and colleagues matched 10,525 patients with PsA and 20,777 patients from the general population and found that from January 1998 through December 2014, patients with PsA had higher total health care costs, lower income (P < 0.001), and a $12,024 higher average societal cost per patient versus matched controls.

The study also showed significantly higher comorbidity burdens for patients with PsA. Versus controls they had baseline odds ratios between 1.25 and 2.03 for neoplasms, cardiovascular disease, respiratory disease, infectious disease, and hematologic disease.

Outcome Measures in Rheumatology (OMERACT) is a loosely structured effort to develop consensus regarding outcome measurements in rheumatological diseases. A recent reevaluation of its 2007 recommendations included newer PsA outcome measurements.

When researchers began evaluating the rheumatological aspects of PsA, Dr. Strand said, they essentially borrowed outcome instruments from rheumatoid arthritis. Now, researchers have developed effective measures for enthesitis (inflammation at tendon, ligament, or joint capsule insertions) and dactylitis (inflammation of an entire digit). “We’re doing a better job of assessing both spinal manifestations and the other articular manifestations of PsA. Both of those contributed to this reevaluation, as well as having many more patients with PsA involved in the effort.”

In 2007, she said, OMERACT had established a solid consensus regarding a core domain set for use in randomized controlled trials. “But since then, we understand more about the heterogeneity of PsA that has skin and musculoskeletal manifestations. And we know that there is a delay in diagnosis. Many patients have psoriasis, as well as musculoskeletal complaints, but they’re not recognized as having PsA when the diagnosis should have been made years before. PsA in general has been underrecognized and/or undertreated for a long time.”

To update the core domain set, researchers conducted literature reviews, focus groups, and surveys with patients and physicians worldwide, yielding a total of 39 unique PsA domains. Ultimately, they used these data to agree upon 10 domains for inclusion in PsA clinical trials. Fatigue was added to the required clinical trial outcomes because it is very important to patients. And musculoskeletal disease activity is more comprehensively defined to include not only joint counts, but also enthesitis, dactylitis, and spine symptoms.
In 2016, OMERACT endorsed the following updated PsA Core Domain Set:\(^4\)

- Musculoskeletal disease activity (peripheral arthritis, enthesitis, dactylitis, and spine symptoms)
- Skin disease activity (skin and nail)
- Pain
- Patient global health
- Physical function
- Health-related quality of life
- Fatigue
- Systemic inflammation

“The effort is half done in that we picked the domains that we believe are important and should be evaluated in all trials. Now we must pick the preferred instruments for those particular domains. That work is ongoing, and we expect to have that completed in the next couple of years,” Dr. Strand said.

### Ankylosing Spondylitis: Secukinumab Limits Radiographic Progression

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Many 2016 ACR/ARHP presentations featured data from long-term extensions of the original Food and Drug Administration (FDA) phase 3 trials that led to the approval of secukinumab (Cosentyx, Novartis) for PsA and ankylosing spondylitis (AS) in January 2016. Secukinumab also earned FDA approval for adults with moderate-to-severe plaque psoriasis in January 2015 and European approval for AS and PsA in November 2015.

Studies from the meeting support treatment with secukinumab for these indications, Dr. Baraliakos said. “Also important is that the outcomes we have found were not different from what we have known in patients treated with tumor necrosis factor alpha (TNFα) blockers. This means that secukinumab appears to be a new mode of action, which is as effective as TNFα inhibitors in PsA and AS.”

Secukinumab is the only interleukin 17A (IL-17A) antagonist indicated by the FDA for psoriasis, PsA, and AS. It is also the first FDA-approved fully human IL-17 inhibitor to demonstrate sustained improvements in PsA signs and symptoms, including patient-reported pain, through three years.\(^5\) Response rates were consistent from the first year of follow-up (69.4% achieving 20% or greater improvement in symptoms using the ACR scale) through the third year (76.8%), whether or not patients had previously received an anti-TNF therapy, as many patients with PsA have.

The established form of spondyloarthritis, AS typically strikes young people, affecting the axial skeleton (the spine and sacroiliac joint), causing pain, inflammation and, if not successfully treated, fusion, leading to inability to move the spine over time. Radiographic progression (RP) refers to bone and joint changes in the axial skeleton that are visible on x-ray.

Before the approval of secukinumab, Dr. Baraliakos said, potent options for patients with AS included only nonsteroidal anti-inflammatory drugs (NSAIDs) and TNFα blockers. Many patients do not respond adequately to NSAIDs. And while TNFα blockers have shown efficacy in reducing signs and symptoms of AS, none have demonstrated the ability to prevent RP after the first two years of treatment.\(^6\)–\(^8\) Similarly, data from a phase 3 trial of secukinumab have shown that approximately 80% of patients randomized to this drug at baseline showed no RP after two years of treatment (although this analysis did not include a control group).\(^9\) “For the first two years, there was no loss of response. Patients maintained their initial response levels,” he said.

Phase 3 data also showed that, similar to what was known from treatment with TNF inhibitors, the patients who respond well early in treatment tend to be the ones who maintain good responses over time.\(^5\) Many patients achieved noticeable responses after just two weeks of treatment. Patients were initially evaluated using the Assessment of SpondyloArthritis International Society response criteria (ASAS20), which are defined as an improvement of at least 20% and an absolute improvement of at least 10 units on a 0–100 scale in at least three of the following domains: patient global assessment, pain assessment, function, and inflammation. Most (71% and 67%, respectively) of ASAS20 responders at week 2 or 16 showed improved responses to ASAS40 by week 16 or 52. A majority (64% and 84%, respectively) of ASAS40 responders at week 2 or 16 maintained this response by week 16 or 52. Similar trends occurred in ASAS responses between weeks 16 and 104.\(^10\)

This pattern of fast response predicting long-term response is also a positive finding because secukinumab has demonstrated the same pattern in response compared with the gold standard, which so far has been TNFα blockers, Dr. Baraliakos said. “And we saw no safety signals that would worry us in short- and long-term treatment so far.”

In another study, Dr. Baraliakos and colleagues examined whether physicians could limit patients’ radiation exposure by replacing x-ray and computed tomography (CT) with magnetic resonance imaging (MRI). They took patients who had AS and compared the number of erosions and other structural changes found and missed by the three techniques. “We found that there is no superior technique in general.”\(^11\)

It appears that the “slicing” techniques (CT and MRI) outperform x-ray (a cumulative technique) overall. And it seems that in the early stages of the disease, MRI may be better than CT because MRI assesses the cartilage damage more thoroughly. In the later stage of AS, he said, CT might be superior to assess erosions because the damage has progressed from the cartilage to the bone. “So presently, we can say that x-rays are acceptable for detecting erosions, but MRI may be an important imaging technique to replace it. It is associated with no radiation exposure, which is a positive for the patient. Going forward, researchers must reproduce the data and see that they apply in other patients and other cohorts as well.”

### REFERENCES


