Transcript Details

This is a transcript of an educational program accessible on the ReachMD network. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/medical-industry-feature/quest-better-understand-axial-psoriatic-arthritis/12161/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

The Quest to Better Understand Axial Psoriatic Arthritis

Announcer:
Welcome to ReachMD. This medical industry feature titled, "The Quest to Better Understand Axial Psoriatic Arthritis," is sponsored by Novartis Medical Affairs.

Dr. Birnholz:
Axial Psoriatic Arthritis, or axPsA, is a challenging clinical entity to characterize. With a prevalence ranging anywhere between 12.5% and 78% of psoriatic arthritis, or PsA patients, because the very definitions and inclusion criteria. This leads clinicians to ask, “How can we accurately diagnose something, if it’s not commonly understood? And is axPsA distinct enough from coexisting ankylosing spondylitis, or AS, and psoriasis to stand on its own?” Well, today, we’ll explore these and other questions on the path toward a clearer definition of axPsA.

This is ReachMD and I’m Dr. Matt Birnholz. Joining me is Dr. Alexis Ogdie, Associate Professor of Medicine and Epidemiology at the University of Pennsylvania. This presentation is sponsored by Novartis Medical Affairs and all speakers have been compensated for their time. Dr. Ogdie, welcome to the program.

Dr. Ogdie:
Thanks, so much, for having me.

Dr. Birnholz:
Great to have you with us. So, before we dive in, can you give us a brief overview of axPsA, as you understand it, in the context of the overall disease, and help shed some light on its variable burden on patients?

Dr. Ogdie:
Great, so, psoriatic arthritis, by itself is an inflammatory chronic musculoskeletal condition, um, that it’s associated with multiple different clinical features. These include things like peripheral inflammatory arthritis, but also enthesitis, or inflammation where a tendon, ligament or joint capsule inserts onto the bone, and dactylitis, or swelling of an entire digit, like a sausage. But beyond these characteristics, as well as skin and nail disease, psoriasis and psoriatic nail disease, patients could also have axial spondyloarthritis. Axial disease, or axial PsA occurs in about 12 to 78% of patients, so let’s say somewhere around the 20 to 30% range. The variation is wide because there’s actually no standard definition for what axial PsA is. So, if you’re kind of talking about the x-ray damage associated with axial PsA, it’s probably more around that 12% range or if you’re talking about just back pain symptoms it’s more in that 70 to 75% range. Back pain in PsA is very common. So, there’s a lot to learn still about how to define axial PsA, um, but we do know that it does need to be treated and it needs to be recognized, so that’s what we’re going to be talking about today, is how do you recognize it and how do you define it, or how should we be thinking about this in clinical practice?

Dr. Birnholz:
And Dr. Ogdie, I understand that substantial efforts have been made to help describe this axial involvement in PsA, but this kind of revolves around meeting certain criteria, such as the ASAS criteria; what can you tell us about that?

Dr. Ogdie:
Right, so right now, the main way we define axial spondyloarthritis is by using the ASAS criteria. So, the ASAS criteria are basically the patient has to have inflammatory back pain lasting more than three months, they have to be under the age of 45 when the back pain first starts and then they can meet the criteria one of two ways: one is they have an imaging feature of spondyloarthritis, so sacroiliitis on an

x-ray, for example, and then they meet one additional SpA criteria and then the alternative way of meeting the criteria is to have HLA-B27 positivity and then meeting two of the spondyloarthritis criteria. So, that's currently how axial spondyloarthritis is defined, but it turns out that kind of breaks down a little bit in psoriatic arthritis; many people with psoriatic arthritis meet those criteria and it's not quite clear if that's really the best way to define axial PsA, so, there are efforts ongoing to better define criteria that would be used to define axial PsA.

Dr. Birnholz:
And, of course, with that understanding of there being no real consensus definition of axPsA, maybe we can dive into other ways in which we can investigate and find some clarity. Are there any genetic foundations helping shed more light on axPsA?

Dr. Ogdie:
Well, first of all, HLA-B27 is probably the gene that we all know best associated with axial spondyloarthritis, in general, and it turns out that if you have psoriatic arthritis and a positive HLA-B27, that patient is much more likely to have axial PsA, as well. If you have HLA-B27 and you have PsA, you're also more likely to have a more aggressive course of the disease, like more erosions, and also more likely to have bilateral versus unilateral sacroiliitis, for example. So, HLA-B27 does have some meaning in psoriatic arthritis. There may be other genes, as well, some that we don't, that we know less about; one of these genes is HLA-B08, so we're still learning about that, but it does seem to be associated with the axial PsA, as well.

Dr. Birnholz:
And what about the clinical presentation for axPsA, Dr. Ogdie? Are there any trends or patterns that you think we should keep in mind?

Dr. Ogdie:
Well, one thing is that, in general, our PsA patients are going to be older than our axial spondyloarthritis patients and that is also true of patients with axial PsA. So, axial PsA tends to have, kind of, they're slightly older than that typical axSpA patient that we might see. Additionally, there's going to be more of an equi-gender, so, male-to-female ratio that's closer to 1:1 as it is in PsA, in general. In axSpA, there's still more of a male-predominant disease, although we're learning over time, that that is kind of equalizing a little bit more than we used to think; it was much more male-predominant.

Additionally, patients with axial PsA, may have earlier onset PsA, in general. Again, we need more studies to kind of fully sort that out, but at least some studies have suggested that.

Now, one of the chief ways that we look for axial PsA is, by asking our patients with psoriatic arthritis in front of us about whether or not they have back pain. And then naturally, the next few questions that follow are those of the inflammatory back pain criteria.

So, over the last couple of years at both ACR/EULAR, there's been a number of studies presented that have suggested that inflammatory back pain criteria don't fit so well in psoriasis patients or uveitis patients and I think that's also been found to be true in psoriatic arthritis. In fact, just from my own clinical experience, I'll see a patient with psoriatic arthritis who's reporting back pain and I'll think that sounds completely like mechanical back pain, that doesn't sound like inflammatory back pain, at all. And then what you find is that they actually have sacroiliitis, so I think that underscores how important it is to not rely too heavily on inflammatory back pain criteria; while they may be helpful, they're not the end-all, be-all, particularly in PsA. It's also important to note that a lot of our PsA patients are already on therapy, so that might change the characteristics of the back pain that the patient is reporting to, so it might not fit perfectly what we know from that new axSpA patient that's presenting.

And then finally, areas of spinal involvement may be slightly different in PsA. In general, we still say, "go for the sacroiliac joints, that's where most of the money is", however, in PsA, there is sometimes some more cervical involvement, at least that's kind of been part of the story in a few studies. There is some cervical involvement even without sacroiliac joint x-rays. And I can think of one patient where I thought, "This is so weird, he must have sacroiliac joint abnormalities because he had such bad cervical disease" and it turns out, he just didn't. So, I think that we do find that occasionally in axPsA. So, when you're imaging, you want to still go for the sacroiliac joint first, or the sacroiliac joints, but then also consider the other areas where there's pain happening, like the thoracic spine or the cervical spine, for example.

Dr. Birnholz:
Yeah, that's really insightful, Dr. Ogdie. Well why don't we consider the clinical presentation aspects a little bit more broadly, then, and there seems to be a relationship between axial disease and overall disease severity. Is that true?

Dr. Ogdie:
That is true, at least in the few studies we've seen, so again, there's not great studies for axial PsA, and again, they're also defined very differently. But in some of the studies where patients had axial PsA, that was found to be associated with worse disease overall, so, worse peripheral involvement, worse skin, worse nails, worse enthesitis in patient-reported outcomes. And that may be for a variety of

reasons, maybe they've had the disease longer, maybe it's been untreated longer, we don't really know, but either way, that has been identified in studies. So, again, just important to identify these patients and make sure that they're being treated. It's also possible that there's other, there may be increased comorbidities and I guess that's something we're still learning about, too. We don't have a lot of long-term data for axial PsA and again, they're all defined differently, so different studies are finding different things. But we really need these long, longitudinal cohort studies and they're in progress, but it's going to be some time before we know a lot about the, kind of, overall prognosis over a period of time.

Dr. Birnholz:
Well, for those just joining us, this is ReachMD and I'm Dr. Matt Birnholz. Today I'm speaking with Dr. Alexis Ogdie about the finer details of axial psoriatic arthritis.

So, Dr. Ogdie, why don't we focus on the diagnostic tools and assessments that are useful to identifying this disease, and first, what are some imaging features that help differentiate the spondyloarthropathies?

Dr. Ogdie:
Well, first, let's think about how you work it up. So, if you have a patient you're sitting in front of with psoriatic arthritis and they have back pain, the first thing you're going to do is order a sacroiliac joint x-ray. Now, if the sacroiliac joint x-ray is abnormal, you'll then go on to get an MRI of the pelvis. So, one kind of key point here is that a lot of our patients will not have x-ray features, so you want to make sure you're looking at an MRI. Also, just a couple caveats when you're looking at the MRI, you want to make sure if they're on therapy, so they're on a therapy that's treating sacroiliitis, you just might not see it, so maybe that's not the time to get it.

So, what are some x-ray features? So, they're going to be the typical x-ray features for ankylosing spondylitis, things like sclerosis on both sides, erosions, new bone formation. So, complete ankylosis of the sacroiliac joints is not that common in axPsA, or at least not as common as in ankylosing spondylitis, so that's one differentiating factor. Additionally, the syndesmophytes may look a little bit different, so there's been again, just a few studies, but those studies have suggested that the syndesmophytes in axial PsA may be a little chunkier, maybe more likely to be non-marginal, than typical ankylosing spondylitis syndesmophytes.

Dr. Birnholz:
And what about the MRI features? It sounds like there are some distinguishing aspects that we should know about, for those of us with discerning minds in this space?

Dr. Ogdie:
Great, yes, so when you're looking at an MRI of the pelvis, for example, you're gonna look at the same features that you'd be looking for in axial spondyloarthritis. So, these, two key features are bone marrow edema and bone erosions. So, you'll see these on no contrast, but on T1 and then the STIR images or fat-suppressed images.

If you just got MRIs of the pelvis for patients with inflammatory back pain in psoriatic arthritis, about 45% of them would have an abnormal MRI. The same things that we think about with axial spondyloarthritis and MRI of the pelvis still exists in axPsA, so, consider whether the patient's post-partum, they may have abnormal or they'll have bone marrow edema, for example, up to even 12 months after a baby was born. Additionally, marathon runners and hockey players have been found to have some bone marrow edema there, without erosions, so erosions are pretty specific for an actual problem that's going on that's related to inflammatory disease, but bone marrow edema can be caused from other issues, like sports. So, maybe it's good if you just have bone marrow edema, it's good to get a sense of what they patient was doing or whether that they ran a marathon before their MRI.

Dr. Birnholz:
And is there any overlap or confusion with other pathologies such as diffuse idiopathic skeletal hyperostosis, or DISH?

Dr. Ogdie:
DISH is always confusing in psoriatic arthritis. It's not an infrequent finding, either, and one of the things to caution with all of these imaging features is that the average radiologist is not trained to look at these things, so, you really have to look at this yourself. Differentiating DISH from axPsA is very difficult, and sometimes, if you, if you have that classic candle wax flowing osteophytes, this can be very, you know, "DISH", so, if it's more of the thin syndesmophytes, it's going to be much more axSpA, but sometimes it's really difficult to differentiate the two and they can possibly even coexist. So, getting a look, yourself, will help, and that's important because you want to know what to expect from treatment. DISH is not going to respond to our therapies in the way that axial spondyloarthritis or axial PsA will.

Dr. Birnholz:
And Dr. Ogdie, if we turn to the subject of assessment tools, have any assessment tools proven helpful in assessing axial involvement in PsA?

Dr. Ogdie:
So, this is an area that still really needs development. Currently, in axial PsA, we're using the same tools from axial spondyloarthritis to measure a response to therapy, for example, or even to define that it's present. So, the most common tools in axSpA to look for response to therapy are the BASDAI, which is a six-item, patient-reported outcome measure and the ASDAS, which is a combination of some items from the BASDAI, as well as a C-reactive protein. And then other things that we use as well, such as the ASAS criteria and BASFI.

So, let's talk about the BASDAI first: so, the BASDAI is a six-item questionnaire, only one of those is actually specific to spine disease; question number two asks about spine pain. The other items are related to things like fatigue, peripheral joint pain and stiffness, for example. So, if you think about it, that doesn't differentiate well from someone who has just peripheral arthritis compared to axial PsA and that's what we see in the studies, as well, is that when you use BASDAI in PsA, it works great, but it doesn't differentiate well between response for peripheral arthritis response from axial disease. So, we still need better measures, there.

ASDAS, the CRP is also elevated about 50% of patients with axial PSA, axSpA or PsA, so either way, the CRP isn't really differentiating, either. So, while these measures may suggest that the patient is responding well in the subpopulation, it's not necessarily specific to them responding well in the axial component. So, now the only way we really know how to do that is through imaging, so this is really going to enhance and elevate the importance of imaging as a biomarker for response to therapy and as well as defining PsA. Now, other things that we can think about, in terms of monitoring spine, or axial disease in PsA are just things like a simple spine VAS pain questionnaire. So, for example, "over the past seven days, how's your spine pain been on a scale from 0 to 10?" So, that's commonly used in trials, as well as in clinical practice. And then the global assessment of disease activity overall, obviously, you want the patient to overall feel better. So, those are easy things to follow in clinical practice.

Dr. Birnholz:
It sounds like we should, at least, acknowledge that in the absence of more objective biomarkers, all of these assessment tests are going to be a little bit reliant, or entirely reliant on subjective measures and patient-reported measures. Can you speak to that challenge a little bit and, and how you try to work through that?

Dr. Ogdie:
Exactly. So, I think that that is the work ahead is to figure out what we can do to figure out how to separate out the back pain from the rest of what's going on. And I think, in the absence of any biomarkers, as you said, there really are no biomarkers for disease activity or response to therapy or even diagnosis in psoriatic arthritis, axial psoriatic arthritis or axial spondyloarthritis. So, we're kind of like, hands tied behind our back from a biomarker perspective, right now. However, imaging does help, so, I think this is going to be increasingly used in defining axial PsA, but also defining response to therapy in axial PsA. So, this is an area of ongoing investigation right now.

Dr. Birnholz:
Well, clearly, Dr. Ogdie, based on everything you've shared with us up to this point, it's safe to say that there are ongoing challenges here in this path toward defining axial PsA given the variance and differential overlap and clinical presentations, the radiographic findings, the assessment tool discriminations that you just spoke to. But if we take all of that in mind, what do you think is going to move us in the right direction for defining and differentiating this disease?

Dr. Ogdie:
So, right now, there's an ongoing set of prospective on longitudinal cohort studies, and so we'll, hopefully learn more about that. And additionally, the ASAS group, as well as GRAPPA, the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis, are developing, together, criteria to define axial PsA that will likely involve some sort of imaging. And then also, they're going to work on outcome measures, so, how do we define response to therapy in axial PsA? So, this is a really important adventure that they're that they're at least halfway through, now, and hopefully we'll be hearing some outcomes from that process within the next one to two years.

Dr. Birnholz:
And I understand, as far as the GRAPPA group goes, you, yourself are part of that. Any reflections or takeaways to impart to our audience before we close?

Dr. Ogdie:
Yeah, I think GRAPPA is really interested in figuring this piece out and has been interested in this for a really long time and I think it's exciting that we're now, kind of, at a point where we're getting close to that, those recommendations and really have buy-in from another organization that studies axial spondyloarthritis. So, I'm really excited about what we'll be seeing in the next couple years in this domain of axial PsA.

Dr. Birnholz:

Well, I think that's an excellent forward-looking outlook on the diagnostic and therapeutic potential and these continuing collaborations that we're seeing, as defined by some of the groups of which you, yourself, are part of, and I think that's a very fitting way to close out our program, today. With that in mind, I want to thank my guest, Dr. Ogdie for helping us better understand the path toward a clearer definition for axPsA. Dr. Ogdie, great to have you on the program. Thanks, so much.

Dr. Ogdie:
Thanks so much for having me.

Announcer:
This program was sponsored by Novartis Medical Affairs. If you missed any part of this discussion, visit ReachMD.com/industry-feature. This is ReachMD. Be part of the knowledge.

4/21 M-XAT-1401753