

SPONDYLOARTHROPATHIES: Recognizing the Clues to Diagnosis

By Anthony M. Turkiewicz, M.D., Co-Director of Clinical Research Unit, of Rheumatology Associates, P.C.



Anthony M. Turkiewicz, M.D.

Introduction

The spondyloarthropathies (SpA) are a diverse group of chronic inflammatory conditions linked by distinctive clinical, radiographic and genetic features. The SpA include ankylosing spondylitis (AS) - regarded as the prototype; psoriatic arthritis (PsA); reactive arthritis (ReA); enteropathic or inflammatory bowel disease (IBD)-associated SpA; and undifferentiated SpA (uSpA). Inflammatory back pain (IBP) and enthesitis (inflammation at sites where tendons, ligaments and joint capsule fibers attach to bone) are hallmarks of this family of disorders. Extra-articular manifestations including psoriasis, anterior uveitis and inflammatory bowel disease make the SpA a diverse family of diseases with a wide range of clinical manifestations. Because these disorders are not associated with rheumatoid factor or other autoantibody serologic abnormalities, they have been labeled as “seronegative” spondyloarthropathies. Up to 70% of SpA individuals carry the HLA-B27 gene, and the strength of the association between HLA-B27 and disease susceptibility varies among the SpA subtypes as well as ethnic groups.

Improved understanding of involved pathogenic processes of the SpA and advances in biotechnology have led to new therapies that significantly decrease disease activity and improve function; namely, the

... CONTINUED ON PG 2

SEXUALLY TRANSMITTED INFECTIONS IN JEFFERSON COUNTY

By Elizabeth G. Turnipseed, MD, MSPH, Director, Disease Control, of Jefferson County Department of Health



Elizabeth Turnipseed, M.D.

In November, the CDC released its sexually transmitted infection tables for 2006. As anticipated, Jefferson County led the nation with its syphilis rate of over 36 cases per 100,000 population. The County experienced an initial increase in syphilis in 2005. Cases continued to increase through 2006, but seemed to stabilize by late 2007. It is too early to claim that the outbreak has peaked, but increased Jefferson County Department of Health staffing, community outreach and education efforts, vigilance on the part of community physicians, and the natural cyclic nature of the disease are favorably influencing the trend. There have been approximately 50 fewer cases of syphilis this year, compared to this time in 2006, a change which represents an 11% decline.

Despite recent attention focused on the syphilis outbreak, the insidious problem of other sexually transmitted infections (STIs) remains under-recognized. Alabama routinely ranks among the states with the highest rates of gonorrhea and chlamydia. In 2006, rates for gonorrhea and chlamydia in Alabama ranked fourth and fifth in the nation, respectively. Jefferson County is an important contributor to statewide morbidity from all sexually transmitted infections. To provide some perspective, Jefferson County's chlamydia rate was 677 cases per 100,000

... CONTINUED ON PG 2

Articles which are included in this publication are not peer-reviewed and the content of the articles is the sole-responsibility of the author. The Jefferson County Medical Society does not assume responsibility for the accuracy or content of any articles published in *Pulse*.

anti-tumor necrosis factor (TNF) agents, all currently FDA-approved for treatment of AS and PsA. With the availability of these therapies and more biologic response modifiers in various stages of research, early detection and diagnosis of the SpA has become a critically important goal. Recognition of the clinical manifestations of these disorders is essential to prompt consultation and management.

Diagnostic Challenge

As with most rheumatologic disorders, there is no one pathognomonic clinical or laboratory feature of the SpA which easily clinches the diagnosis. The SpA in particular can be challenging to diagnose in the early phases of the diseases before radiographically evident changes occur and, since symmetric polyarticular peripheral synovitis as in rheumatoid arthritis (RA) is not a typical manifestation of the majority of these diseases, reliance on a detailed history and physical exam are an essential component to diagnosis. Imaging modalities can supplement the clinical evaluation and play an important role in the diagnostic process. While inflammation of the sacroiliac joints (sacroiliitis) is the hallmark radiographic feature of SpA, the delay in radiographically detectable sacroiliitis from the onset of symptoms (an average of 8 years) remains one of the major hurdles to prompt diagnosis of SpA. Beyond conventional radiographs, MRI and ultrasound have become an important modality to earlier diagnosis of SpA.

Axial manifestations - a unique type of back pain

Recognition of the key manifestations of IBP is an important component in SpA diagnosis. In contrast to common mechanical back pain, IBP is characteristically worse in the late night and early morning while the patient is asleep and results in prolonged morning stiffness. The pain often interferes with sleep to the point that the patient gets up to walk in the middle of the night, and the discomfort is often associated with alternating buttock pain. Exercise alleviates the pain of IBP while rest makes it worse. At the outset, IBP affects younger patients, peaking during the mid-20s with onset before the age of 40, when patients are typically at their height of productivity. While young, Caucasian, HLA-B27-positive males are erroneously

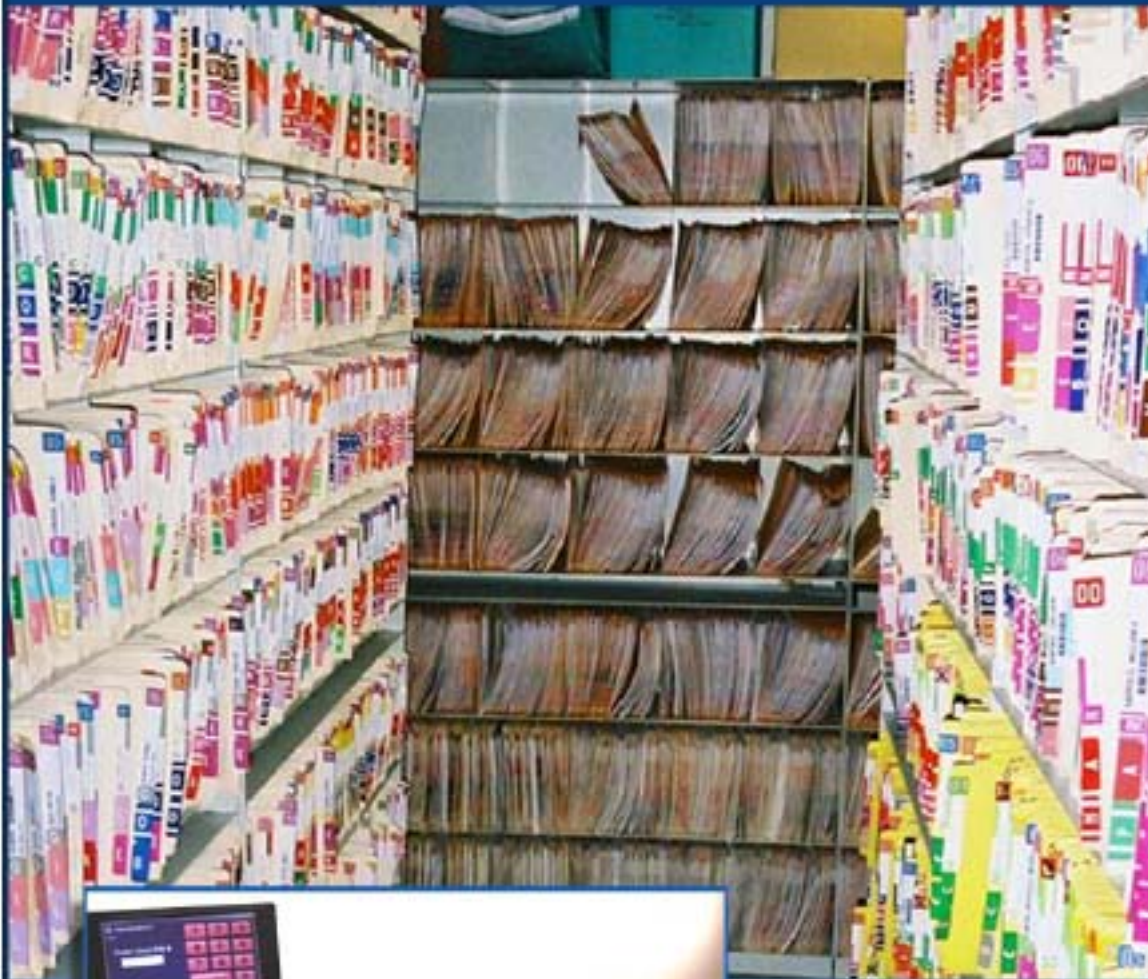
population and the gonorrhea rate was 323 cases per 100,000 population in 2006, both markedly higher than the syphilis rate causing current alarm. Though everyone who is sexually active is at risk, the disease burden is not shared equally. These infections disproportionately affect people who are economically disadvantaged or are members of a racial minority. African Americans in Jefferson County are diagnosed with syphilis at a rate eight times higher than Caucasians. Rates of gonorrhea are approximately 22 times higher for African Americans than Caucasians in our community. The consequences of unchecked sexually transmitted infections include social stigmatization, poor pregnancy outcomes, genital cancers and infertility. Important corollaries that are frequently ignored include the stress infection places on affected individuals and the degree to which sexual infections occur in tandem with physical and emotional abuse.

The fact that these infections remain so prevalent in our population reflects underlying deficiencies in health education and access to care. African Americans suffer disproportionately as a result of these barriers. Root causes for these disparities are multifactorial and are beyond the scope of this article. While our most basic responsibility as physicians and as members of the Jefferson County Medical Society is to accurately diagnose and treat these infections, we should also take responsibility to educate our patients about sexual health, STIs, and appropriate strategies to prevent infection. Successful STI interventions require dissemination of unbiased, accurate, comprehensive information, and physicians shoulder considerable responsibility to ensure that this is widely available. Equitable and effective sexual health promotion will remain elusive unless we demand honest dialogue about sex and de-stigmatize efforts to promote sexual health in community venues.

Reminder to Physicians:

Please be advised that varicella (chickenpox) is a Class B notifiable disease in Alabama. Physicians are required to notify their local health department within seven days of diagnosis. Reports should be made through the routine channels. Questions regarding cases diagnosed in Jefferson County may be directed to Kamisa Willis at the Jefferson County Department of Health by calling (205) 930-5572.

So, you bought an EMR system but ...
your chart room still looks like this



 ChartCapture™



You're not alone.

The majority of practices that purchase EMR systems have paper problems years after their install.

It's time to reclaim your office and take the paper out of the picture.

ChartCapture can help.

ChartCapture.com



See the video on
www.ChartCapture.com

Call (866) 558-8098 to learn more
info@ChartCapture.com

 **ChartCapture™**

is Chart Scanning... Made Simple.

Bridge the gap between your paper charts and electronic medical record...

ChartCapture will help you quickly complete the transition to a truly paperless practice.

New Members

Gary Morgan Bullock, D.O. Family Medicine
 Marshall Crowther, M.D. Pediatrics Children' s Hospital
 James S. Faulkner, Jr., M.D. Orthopedics Medical Center East
 Harlod Eugen Giles, M.D. Nephrology Princeton
 Robert Patton Goolsby, M.D. Obstetrics/Gynecology St. Vincents
 Adrienne Carol Lahti, M.D. Psychiatry UAB
 Robert McCullumsmith, M.D. Psychiatry UAB
 Darby H. McElderry, M.D. Pediatrics Children' s Hospital
 Emily Yvette Melton, M.D. Obstetrics/Gynecology Cooper Green Hospital
 Joshua Bailey Miller, D.O. Family Medicine. Cooper Green Hospital
 Saema Mirza, M.D. Cardiology Trinity Medical Center
 Thomas Glasgow Preston, M.D. Internal Medicine
 Tomeka Roberts, M.D. Obstetrics/Gynecology Brookwood Medical Center
 Paige Calhoun Roy, M.D. Physical Med & Rehab UAB
 Aaron Ben Schuller, M.D. Emergency Medicine. UAB Resident
 William Peyton Shirley, M.D. Otolaryngology Children' s Hospital
 Ramy J. Toma, M.D. Internal Medicine Princeton
 Gregory Wayne Umphrey, M.D. Anesthesiology Physician' s Carraway
 Matthew Gerard Vicinanza, M.D. Ophthalmology Callahan Eye Foundation
 Nancy L. Zumstein, M. D. Pediatrics Princeton

In Memoriam

The JCMS wants to acknowledge the recent passing of the following JCMS members:

Thomas Allen Hoke, M.D.
November 29, 2007

Anderson M. Morris, M.D.
December 2, 2007

Lee B. Chapman, M.D.
January 6, 2008

Joseph Edward Welden, M.D.
January 7, 2008

Upcoming Events

Feb. 19 The Wayne Finley 811 Breakfast Club Meeting – Lonnie Funderburg, M.D. will speak on Medical Missions at 8:30 a.m. in the JCMS Board Room

Feb. 21 Modifiers Coding Class

Mar. 18 The Wayne Finley 811 Breakfast Club Meeting – Ed Stevenson, M.D. will speak on The Origin of the Alabama Otolaryngology Society and How the School of Optometry Played a Part in its Formation at 8:30 a.m. in the JCMS Board Room

Mar. 24 Executive Committee Meeting – 5:30 p.m.
Board of Directors Meeting – 6:30 p.m.

Mar. 27 E & M Coding Class

April 8 MASA Sixth District Caucus Meeting -
5:30 p.m. Social
6:00 p.m. Meeting

April 15 The Wayne Finley 811 Breakfast Club Meeting – Thomas A.S. Wilson, M.D., will speak on the Wilson Family of Physicians at 8:30 a.m. in the JCMS Board Room

April 17 Urology Coding Class

April 21 Executive Committee Meeting – 5:30 pm

May 3 JCMS Family Night at the Barons Game – 7:05 p.m.

May 20 The Wayne Finley 811 Breakfast Club Meeting – Richard O. Russell, M.D. will speak on the History of Cardiology in the Area at 8:30 a.m. in the JCMS Board Room

May 22-25 MASA Annual Session - Sandestin

Contact Juanita Pruitt at 933-8601 for more information regarding any of the above events.

NEED A PAGER OR RELIABLE ANSWERING SERVICE?


Call Mary Whitehead at **(205)933-8601**

JEFFERSON COUNTY MEDICAL FOUNDATION TRUST ANSWERING SERVICE

- **medical only**, answer for approximately 2,000 people
- controlled by Jefferson County Medical Society physicians
- experienced operators—in existence for over 20 years
- all calls are answered by live operators and are verified

PAGER SERVICE

- alpha and numeric pagers available
- same day delivery/replacement/activation standard
- replacements available 24/7



Alabama Department of Public Health
Center for Emergency Preparedness

ADPH
EMERGENCY PREPAREDNESS
Alabama Department of Public Health

Save the Date

Monday, April 28, 2008

For a Public Health Area IV
(Jefferson County)

Conference at the Homewood Public Library
Homewood, AL

"Fatality Management During a Pandemic and Other Emergency Events"

Details and Registration
<http://www.adph.org/cep> then select "Training"

SPONDYLOARTHOPATHIES . . . CONTINUED

thought to be at exclusive risk of AS and other SpA, women, non-Caucasian ethnicities and HLA-B27 negative persons presenting with IBP, particularly with other extra-articular manifestations of SpA, should be evaluated aggressively. Women with AS may present differently than men, complaining of neck and breast pain without the typical inflammatory low back pain. Beyond the spine, axial joints including the shoulders and hips can be involved with varying degrees of severity.

Peripheral manifestations - articular and peri-articular

In general, PsA has the most phenotypically diverse peripheral manifestations of the SpA, ranging from a polyarticular symmetric arthritis similar to RA, to predominant distal interphalangeal involvement often with concurrent nailbed changes at the affected joint, to the fortunately rare arthritis mutilans characterized by complete obliteration of articular structures and

resultant marked deformities. The remainder of the SpA including AS and ReA have predominant asymmetric and lower limb arthritis. Enthesitis at areas such as the Achilles tendon and the plantar fascia insertion at the calcaneus and the patellar tendon insertions can present as pain and swelling at the peri-articular region which may be mistaken for frank articular swelling. Dactylitis ("sausage digit") is characterized by diffuse swelling of an entire digit, resulting from a combination of joint synovitis and enthesitis of soft tissue attachments.

Ocular manifestations

Uveitis is one of the most common extra-articular manifestations of the SpA, occurring in 25 to 40 percent of patients. The uveitis typically presents as acute unilateral pain and photophobia; blurring of vision may also occur. Recurrence despite successful treatment is common. Patients who present with visual

SPONDYLOARTHOPATHIES . . . CONCLUDED

complaints in the SpA setting should be referred promptly to an ophthalmologist for thorough evaluation including slit lamp examination.

Cutaneous manifestations

Plaque psoriasis, characterized by scaly, erythematous, hyperkeratotic lesions, is the most common form of psoriasis and is an important component in the diagnosis of PsA. Careful examination of the skin should be performed, including less conspicuous areas such as the gluteal cleft, scalp and groin. Diffuse nail pitting (plate depressions), onycholysis (separation of the nail from underlying nailbed), and crumbling of the nail plate can be observed in both psoriasis and psoriatic arthritis. ReA has characteristic lesions including keratoderma blennorrhagica, characterized by hyperkeratotic skin lesions on soles and palms, and genital lesions such as circinate balanitis, an erythematous and painless lesion of the glans penis. In IBD-associated SpA, erythema nodosum can be observed in Crohn's disease while pyoderma gangrenosum is associated with ulcerative colitis.

Gastrointestinal Manifestations

Inflammatory bowel mucosal lesions can be seen in up to 66% of SpA patients. Ileal and colonic mucosal ulcerations, typically asymptomatic, can be observed. Peripheral arthritis, typically an asymmetric pauciarticular form, and gut inflammation often occur in tandem.

Antecedent Infections

Enteric infections and infections causing urethritis are key pathogens which have the potential to trigger ReA; *Chlamydia trachomatis*, *Salmonella*, *Campylobacter*, *Shigella*, and *Yersinia* have been identified as key players. The classical symptoms of these infections include diarrhea and urethritis, although it is also possible for the causative infection to be asymptomatic. Typically, an asymmetric, lower extremity predominant oligoarthritis is observed within two to three weeks of developing infectious symptoms.

Just as physicians use CME for professional development and to enhance their skills and knowledge base,

The health care manager has MGMA (Medical Group Management Association). MGMA is the leading organization devoted to improving the efficiency and effectiveness of medical group practices, and the knowledge and skills of their managers and leaders. MGMA Birmingham is a recognized affiliate of an organization with over 19,000 members representing more than 120,000 physicians nationwide. MGMA Birmingham's diverse membership comprises professionals from medical practices and ambulatory care organizations, including solo and group practices, small to university based practices. With monthly luncheon programs and timely workshops, members have an opportunity to stay abreast of current trends and issues impacting medical practice management.

For more information about MGMA Birmingham, contact us at 205-599-2245



Rarer manifestations

Described mostly in AS patients, cardiac, pulmonary and renal manifestations are less commonly observed in SpA but are important to recognize. Aortic regurgitation is perhaps the most recognized cardiac manifestation, with scar tissue in the aortic valve cusps leading to incompetent valves. Conduction abnormalities and heart block have also been described. Apical pulmonary fibrosis, mostly asymptomatic and typically observed in patients with substantial disease duration, has been noted in a small percentage of AS patients. IgA nephropathy and secondary amyloidosis have been rarely observed.

Conclusion

With the advent of biologic agents now available for SpA treatment, prompt recognition of the wide variety of phenotypic expressions of this diverse family of interrelated diseases has become a critically important goal. Diagnosis continues to rely largely on a detailed history and clinical evaluation, with imaging modalities including MRI and ultrasound providing diagnostic assistance at earlier stages of disease. Prompt consultation and evaluation improves patient access to therapies which now have the ability to provide significant improvement in pain and function.

SAVE THE DATE!!!!

ON SATURDAY, MAY 3, 2008 THE JCMS IS HOSTING ITS SECOND ANNUAL JCMS FAMILY NIGHT AT THE BARONS. THE BARONS WILL BE TAKING ON THE MOBILE BAY BEARS IN A 7:05 P.M. GAME. THERE WILL ALSO BE A SPECIAL SATURDAY NIGHT FIREWORKS SPECTACULAR THAT EVENING FOLLOWING THE GAME (IT'S ALSO BOY SCOUT NIGHT FOR THOSE WHO HAVE BOY SCOUTS!) FAMILY PASSES, EACH OF WHICH WILL ADMIT A FAMILY OF FIVE, ARE AVAILABLE TO MEMBERS THROUGH THE JCMS OFFICE.

PLEASE E-MAIL [MWISE@JCMSALABAMA.ORG](mailto:mwise@jcmsalabama.org) OR
CALL MARTHA AT 933-8601 TO RESERVE YOUR PASS!

A Smoke-Free Alabama

Is such a thing possible? Alabama Senator Vivian Figures is trying to make it happen. She plans to introduce a bill in early February that will prohibit smoking in virtually all workplaces in Alabama, including restaurants and bars. There are a few, very limited exceptions like retail tobacco shops and cigar bars. At its meeting on January 14, the JCMS Board of Directors passed a resolution in support of the legislation. The Board wants to encourage all JCMS members to contact your state representatives to let them know you endorse the legislation and to encourage the representatives to vote in favor of the legislation.

Statistics show that almost twenty-five percent of adult Alabamians smoke—the eighth highest statewide percentage in the country. According to the American Cancer Society, secondhand smoke is the third leading cause of preventable death in the United States and is responsible for the deaths of more than 53,000 Americans each year. A recent survey conducted by the University of Alabama's Institute for Social Science Research indicated that more than seventy five percent of Alabamians would support a comprehensive indoor smoke ordinance in their communities. Twenty-two states, Washington, D.C. and Puerto Rico have all passed smoke-free laws that cover restaurants and bars, and four other states have laws that

prevent smoking in restaurants. Ten countries have passed smoke free laws.

While Alabama has had an indoor air quality law on the books for a number of years, the current provisions fall far short from protecting employees from being exposed to smoke in their workplaces. The JCMS Board would like for each member to contact your State Senator and Representative and encourage them to support the legislation. In addition, spread the word among your staff, the patients for whom you care and their families about the effort to enact this legislation and encourage them to voice their support for the legislation. If someone is not sure who their representative or senator is, they can go to www.legislature.state.al.us and use the tool in the left-hand column labeled "Find Your Legislator"—you simply enter a zip code and it will give you the names of the Representative and Senator for that district. Alternatively, they can contact the State Senate at 334-242-7800 or the House at 334-242-7600.

Historically, physicians have been somewhat reluctant to "get involved in politics"—this is an important issue that directly affects the health of everyone in Alabama. It takes only a few minutes of your time to spread the word about the need to enact this legislation—please do your part!

Your Smart Choice—Recognized

Thousands of medical professionals choose ProAssurance Group companies for our exceptional strength, personalized service, and tough defense against merittless claims.

Now, ProAssurance Group has been recognized on the 2007 Ward's 50—a prestigious list recognizing the top 50 property-casualty insurance companies from over 2,700 companies analyzed. ProAssurance Group is the only specialty professional liability insurer on the 2007 Ward's 50 list whose primary business is medical malpractice insurance.

This honor is yours, too. You have helped us understand what is important. We are responding by delivering the service, stability, and valuable risk management strategies your practice deserves—and all at surprisingly competitive rates.

You deserve a winner—ProAssurance Group, your partner in excellence.

ProAssurance



901 South 18th Street
Birmingham, Alabama 35205
933-8601



Non-Profit Organization
U.S. POSTAGE
PAID
Birmingham, Alabama
Permit No. 1442