MRSA Infections Are Seen in Patients on Anti-TNF Therapy

PARIS — Methicillin-resistant Staphylococcus aureus infections have been reported for the first time in patients with rheumatoid arthritis being treated with tumor necrosis factor inhibitors. In a poster presented at the annual European Congress of Rheumatology, Dr. Jack Lichtenstein noted that he had observed several of his patients receiving tumor necrosis factor (TNF) inhibitors developed severe methicillin-resistant S. aureus (MRSA) infections, so he undertook a review of medical records of all patients in his clinical practice being treated with these drugs between August 2003 and July 2006 to determine the overall incidence and severity of these infections. Among 430 patients receiving infliximab, etanercept, or adalimumab, 15 developed MRSA infections, had to stop TNF inhibitor therapy and received intravenous antibiotics, reported Dr. Lichtenstein, a rheumatologist in group practice in Annopolis, Md.

In addition, 12 patients required hospitalization. Concomitant immunosuppressive treatment included prednisone in 12 patients and methotrexate in six, osteomyelitis in three, sinusitis in two, and septic arthritis in six, osteomyelitis in three, sinusitis in two, and septic arthritis in seven patients, and only two patients were able to resume TNF inhibitor therapy after the infection was controlled. Dr. Lichtenstein wrote that he would no longer continue the use of TNF inhibitors in patients with MRSA or MSSA infections.

About one-third of Americans are carriers of MSSA and 0.8% carry MRSA, and infections with these organisms are expected to be common in immunocompromised patients such as these.

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High Coffee Intake Kicks Up the Risk Of Developing Rheumatoid Arthritis

PARIS — Heavy coffee drinking was associated with progression of undifferentiated arthritis to rheumatoid arthritis in an analysis of data from a Norwegian early arthritis clinic. The study included 280 patients aged 18-75 years with arthritis of at least one joint. The mean age was 45.7 years, median disease duration was 23 days, and 19% were women. Dr. Maria D. Mjaaavatten said at the annual European Congress of Rheumatology that data were collected from a structured patient history. Examinations included swollen and tender joint counts, 10 cm measurement of C-reactive protein and erythrocyte sedimentation rate, and patient-reported health status. At baseline, 130 patients had monarthrosis, 96 had oligoarthritis, and 54 had polyarthritis. At 1 year, 30 of these patients (10.7%) had developed rheumatoid arthritis (RA). Multivariate analysis showed the strongest predictor of RA development was a positive titer of anti-cyclic citrullinated peptide (CCP) at presentation, with an odds ratio of 73.23.

But drinking 10 or more cups of coffee daily was associated with an elevated risk (OR, 22.50), Dr. Mjaaavatten of the department of rheumatology, Diakonhjemmet Hospital, Oslo, wrote in a poster.

The link of coffee intake with RA development is needed, Dr. Mjaaavatten said, noting her results should be interpreted with caution, because the RA incidence was low in this cohort.

Another 10 patients developed methicillin-sensitive S. aureus (MSSA) infections, 5 of which were cellulitis, 4 of which were septic arthritis, and 1 osteomyelitis. Seven of these required hospitalization and nine were given intravenous antibiotics.

Other bacterial pathogens seen in anti-TNF-treated patients included gram-negative bacterial cellulitis in four, severe Clostridium difficile infections in three, and tuberculosis with fatal pneumonia. Mycobacterium marinum joint infection, and Nocardia pneumonia in one each.

For infections in which no bacterial agent was cultured included cellulitis in nine, pneumonitis in six, and diverticulitis in two. MRSA and MSSA infections were more common than were other bacterial infections in this group of anti-TNF-treated patients, according to Dr. Lichtenstein, who noted that MRSA infections are becoming more common and may not respond to available treatments.

Attempts to restart TNF inhibitors after control of the MRSA infections led to recurrent infection in seven patients, and only two patients were able to resume TNF inhibitor therapy after the infection was controlled.

The question of whether strenuous weight-bearing exercise can lead to increased OA was not previously answered before this study.

The researchers assembled a set of runners 50 years of age or older: from the Norwegian Runners Association and a set of diagnostically matched controls from the Stanford Lipid Research Clinic Prevalence Study.

Bilateral anteroposterior weight-bearing radiographs of the knees were taken serially in 1984, 1986, 1996, and 2002. A total of 45 runners (64.4% men) and 53 matched controls (69.8% men) completed at least two sets of radiographs that were used for the analysis.

The mean age for both groups was around 60 years at the first radiograph. Digitized radiographic films were read for narrowing, sclerosis, and osteophytes (each graded on a scale from 0 to 3) in the medial and lateral compartments of each knee by two readers blinded to group assignment, according to Dr. Eliza F. Chakravarty and colleagues from the Stanford (Calif.) University.

The primary outcome measure was the total knee score (TKS), which is the sum of each of the scores from the digitized radiographs mentioned above, from the medial and lateral compartments of both knees.

The secondary measure was the worst joint space width (JSW) in millimeters among the four compartments, which represented the knee with the worst OA. The lowest JSW score, the worse the condition. A joint that was fully replaced was arbitrarily assigned a JSW of zero.

At baseline, runners had a significantly higher TKS than controls (1.29 vs. 0.40, respectively). The JSW of the worst knee was significantly lower in runners (4.34 vs. 4.84).

In this analysis, runners were not associated with accelerated incidence or severity of radiographic OA, the investigators reported. “Our pro-longed period of observation (mean 11.7 years) and despite more prevalent OA and worse radiographic scores at the baseline, runners did not have more severe OA or replaced knees than controls. Although there were some suggestions that runners may have less OA than controls, these did not meet statistical significance.”

The authors suggested that larger studies are needed to determine if running has a positive effect on preventing OA development.

The authors pointed out that the strength of their study was its prospective nature and the length of follow-up; the weaknesses were lack of analysis of clinical symptoms in the radiographic OA evaluation, and the fact that the runners were a self-selecting group of individuals (they chose to run and join a runners’ group) who were healthy and continued running into their 6th decade of life.

Dr. Chakravarty and her colleagues stated there were no conflicts to disclose with regard to this study.

In Older Adults, Running Is Not Linked to Knee OA