□ LETTERS TO THE EDITOR □

Diagnosis of *Chlamydia*-induced Reactive Arthritis

Satoshi Ito, Makoto Sugihara, Takeshi Suzuki,
Mizuko Mamura, Daisuke Goto, Isao Matsumoto,
Akito Tsutsumi and Takayuki Sumida

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Ishii et al described *Chlamydia*-induced reactive arthritis in a patient without urethritis but in whom *Chlamydia* was identified by a combination of serology (immunoglobulin G (IgG) and IgA type antibodies) and polymerase chain reaction (PCR) (1).

We encountered an arthritis patient with false positive test results for IgA antibody. The 46-year-old man was referred with a history of multiple joint pain lasting 2 months and with an elevated C-reactive protein level (7.8 mg/dl). Laboratory test results at the referring hospital showed positivity for IgG and IgA antibodies to *Chlamydia trachomatis* but no pyuria. He did not deny a pertinent sexual history for *C. trachomatis*, and he requested treatment. Minocyclin was prescribed but was not effective. Laboratory tests at our hospital showed positivity for IgG and negativity for IgA antibodies to *C. trachomatis*. Results of PCR were negative. Skin rash was noted on the patient's back, and psoriatic ar-

thritis was diagnosed. Cyclosporin A was administered and was very effective for both the skin rash and the arthritis.

IgG and IgA type antibodies are measured to diagnose *C. trachomatis*, because IgM antibody, which is used as a marker of acute phase infection, cannot be measured for *C. trachomatis*. However, positivity for IgA antibody does not necessarily indicate *C. trachomatis* infection, and *Chlamydia* infection is not always marked by positivity for IgA antibody (2). PCR is highly sensitive and specific, and there is absolutely no cross-reactivity with *C. pneumoniae* or *C. psittaci*. In men, first-void urine specimens can be used, but first-void urine specimens are not appropriate for detecting *C. trachomatis* infection in women because of the likelihood of false-negative results (3). Therefore, first-void urine should be used only for women from whom it is difficult to obtain cervical swab specimens (3). However, when *C. trachomatis* progresses into the fallopian tube or intraperitoneum, cervical swab specimens sometimes show a false negative result. Titers of IgG and IgA antibodies to *C. trachomatis* are high in such conditions and effective in predicting intrapelvic infection (4). Therefore, clinical diagnosis based on a combination of antibodies to *C. trachomatis* and PCR is very important.

In November 2004, strand displacement amplification (SDA) was approved in Japan for the diagnosis of *C. trachomatis*. SDA has sensitivity and specificity similar to those of PCR and is accomplished more easily (5). We expect use of SDA to increase in Japan for diagnosis of *C. trachomatis*.

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Clinical Immunology, Major of Advanced Biomedical Applications, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki

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Reprint requests should be addressed to Satoshi Ito, Clinical Immunology, Major of Advanced Biomedical Applications, Graduate School of Comprehensive Human Sciences, University of Tsukuba, 1-1-1 Tsukuba, Ibaraki 305-8575