

The Problems of Diagnosis of Reactive Arthritis in an Outpatient Clinic

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ABSTRACT

Objective: to study the clinical characteristics of reactive arthritis in outpatients.

Material and methods. 40 pts visited out-patients were under questionnaire, including 60% female and 40% male, mean age 34.1 ± 9.6 years. They underwent a clinical examination, laboratory and X-ray diagnostics.

Results. Depending on the duration of the disease, patients were divided into three categories: patients with acute course was - 9 (22.5%) patients, subacute - 2 (5%) and chronic - 29 (72.5%). Clinical examination showed that the majority of patients had mono-oligoarthritis of the lower limbs, enthesiopathies and concomitant Chlamydia infection.

Conclusion. Thus, in order to reduce the incidence of chronic disease research it is needed to identify the cause of the infection in the early stages of the disease, to assess the condition of the joints through ultrasound. Due to the fact that the reactive arthritis refers to seronegative spondyloarthritis, determination of the presence of HLA-B27 would be of practical and scientific value.

Keywords: reactive arthritis, Chlamydia infection, mono-oligoarthritis.

INTRODUCTION

The term "reactive arthritis" (ReA) as a nosological form was first proposed in 1969 by Finnish researchers P. Ahvonen, K. Sievers and K. Aho, to describe arthritis in patients who had undergone *Yersinia enterocolitis* (Ahvonen P. et al., 1969). According to modern ideas, ReA is divided into 2 groups - urogenital (Chlamydia) and postenterocolitic (*Yersinia*, *Salmonella*, *Campylobacter* and *Shigella*).

Reactive arthritis is an immune inflammatory disease of the joints, initiated foci of infection in the intestine or urogenital tract, having the characteristic clinical picture with the involvement of the peripheral joints and spine, and often takes a chronic course [1, 2].

The incidence of ReA adult population of Russia in 2000-2010 (absolute number, thousand) according to statistical data MH Russia, shows that the total number of registered patients with ReA remained fairly stable throughout the period, with the lowest rate in 2006 - 44.4 thousand, to Unfortunately, in 2010 it increased to 51.1 million (6.7 million, or 13.2%). The

number of patients with a primary diagnosis of ReA was in 2006 16,252, and in 2010 - 19 385, ie 16.2% [3].

ReA usually get sick of working age, causing temporary, but sometimes persistent disability. Because of this, the disease has a social significance.

The purpose of this study was to investigate the clinical characteristics of reactive arthritis in the outpatient cohort of patients.

MATERIALS AND METHODS

For the diagnosis of reactive arthritis have been applied criteria of the American Rheumatism Association [2]:

- 1) asymmetrical seronegative arthritis;
- 2) urethritis or cervicitis, diarrhea;
- 3) inflammatory changes of the eye;
- 4) skin and mucous membranes.

All patients had clinical, laboratory and radiological diagnosis. To verify the causal infection patients underwent testing of biological material from the urethra and / or cervix by Chlamydia trachomatis, Ureaplasma urealiticum and Mycoplasma hominis using the polymerase chain reaction (PCR), and immunofluorescence method used and the formulation of the indirect hemagglutination with Yersinia and Salmonella antigen, seeding Fecal dysentery group.

RESULTS AND DISCUSSION

The study included 40 patients with a mean age of $34,1 \pm 9,6$ years. Among the patients were women - 24 (60%) and men - 16 (40%). An acute illness with a duration of 1 month and 6 months was observed in 9 (22.5%) patients, subacute - with a duration of 6 months. 12 months - y 2 (5%) and chronic over 12 months. - In 29 (72.5%) patients.

It should be noted that the acute course was observed in young people, where the average age was $22 \pm 3,5$. Joint disease characterized mono arthritis in 3, oligoarthritis in 6, it should be noted all observed enthesiopathies. Development of disease after chlamydial infections, genitourinary was found in all patients.

In subacute during a mean age of $27,5 \pm 0,7$, also had connections with Chlamydia infection was detected mono arthritis.

During the chronic mean age was $38,3 \pm 7,5$, disease duration $1,9 \pm 0,7$. These data show a trend of increasing age of chronic disease. The chronic course of the 29 patients, 3 (10.3%) occurred enterocolitic arthritis. Of these, one patient had chest X-ray revealed bilateral sacroiliitis I stage. Joint damage was characterized by oligoarthritis in 2 and one mono arthritis. Pain in the lumbosacral region were moderate and the movement of the spine remained.

If ReA chlamydial origin often met oligoarthritis - 19 (73.1%) than mono arthritis - 7 (26.9%). Unilateral sacroiliitis was observed in 8 (30.8%) patients.

In addition, 14 (53.8%) patients had clinical manifestations enthesitis - inflammatory changes in tendon insertions (ligaments, joint capsule) to the bone.

Regardless of the duration of the disease in 9 (22.5%) patients had a history of eye disease. At the time of the inspection 2 (5%) of the patients were examined and treated, and the rest were no inflammatory changes. An objective examination of skin lesions in patients at the time of the inspection were found. At the time of the survey the current chlamydial infection was detected in 15 (37.5%) of these patients and in 5 (33.3%) of the patients was associated with ureaplasma and 9 (60%) patients with mycoplasma infection. The patient was assigned to antibiotic therapy.

Of the 24 women, 11 (45.8%) showed an inflammatory disease of the genitourinary system, among men - in 7 (43.7%). It should be said that all patients with acute and subacute diseases of the genitourinary system had. Among patients with chronic disease of the genitourinary system were found in 7 (24.1%).

More frequent were clinical manifestations of inflammation in the knee and ankle joints. When X-rays of the affected joints in 7 (17.5%) patients had initial symptoms of osteoarthritis of the knee and heel spurs, 3 (7.5%), while the majority - no changes detected.

According Gaponova T.V. ultrasound of the joints is significantly more informative than X-rays. Unfortunately, due to the lack of ultrasound examination of the joints, the survey conducted [4]. As a result of changes in the joints is detected only for chronic conditions.

As is known [5] determining Chlamydia DNA using dot hybridization of nucleic acids using polymerase chain reaction, has a high specificity and sensitivity. Unfortunately, this study is not carried out in many encampments, as a result of patients fails to receive adequate therapy, which in turn leads to chronic arthritis. Also, the question remains diagnosis of genetic predisposition to seronegative spondyloarthritis patients, particularly in non-differentiated arthritis, which is to determine the presence of HLA-B27 antigen class 1 human major histocompatibility complex.

CONCLUSIONS: In inflammatory lesions of the joints, especially in young patients, it is necessary to investigate the presence of an infectious agent. And it would also be advisable to conduct ultrasound joints at the mono-oligoarthritis. Due to the fact that the reactive arthritis refers to seronegative spondyloarthritis, determination of the presence of HLA-B27 would be of practical and scientific value.



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