OLIGOARTHRITIS ASSOCIATED WITH A “FORGOTTEN” IUD – A CASE REPORT

D. Tanev1, R. Robeva2, I. Hassan3, L. Marinchev1

1Department of Rheumatology, UMHAT „Sofiamed“, Medical Faculty, Sofia University „Sv. Kl. Ohridski“ – Sofia
2USHATE “Acad. Iv. Penchev”, Department of Endocrinology, Medical Faculty, Medical University – Sofia
3Department of Obstetrics and Gynecology, UMHAT „Sofiamed“, Medical Faculty, Sofia University „Sv. Kl. Ohridski“ – Sofia

Abstract. Infection related arthritis has been defined as an aseptic inflammatory arthritis associated with a concomitant infectious disease. Usually, the symptoms develop during or soon after a symptomatic infectious disease, however, in both sexes genitourinary infections might be asymptomatic. Herein, we presented a case of a 68-year old woman with oligoarthritis associated with a “forgotten” intrauterine device (IUD). The IUD was successfully removed by laparoscopy leading to a full resolution of symptoms and improvement of inflammatory markers. The presented case shows that asymptomatic genital infection should be considered in case of suspected infection-related arthritis without clear etiological cause, especially in women with IUD. The in-depth training of patients regarding the proper use of contraception methods as well as the regular gynaecological examinations might help to prevent further similar cases.

Key words: IUD, infection related arthritis, reactive arthritis
Oligoarthritis associated with a “forgotten” intrauterine device (IUD).

**CASE REPORT**

A 68-year old female patient was referred to Rheumatology clinic with complaints of severe pain in her right shoulder and elbow with a limitation of motion in both joints. The symptoms had developed about a week earlier and worsened gradually. Her temperature was normal, and she has no other complaints or symptoms except for chronic back pain associated with thoracic and lumbar radiculopathy. Her medical history included well-controlled arterial hypertension as well as partial resection of the thyroid gland thirty years ago with no subsequent disturbances. The patient reported nine pregnancies including one miscarriage, two live births and six abortions. She had used an intrauterine device (IUD) for contraception since the age of 36 years, but claimed that the IUD had been removed. Her last menstrual period occurred at the age of 43 years and she has no gynecological complaints thereafter. However, in her outpatient medical records a recent plain X-ray of the pelvis was found, where the IUD was visible.

The laboratory values of the patient were consistent with infection despite the good overall condition and the apyrexia (ESR 80 mm/h, Leu 10.0/12.5 be used if the clinical manifestations are associated with spondyloarthropathy and HLA-B27 carrier status, whereas other cases should be described as „infection related arthritis (IRA)” [3]. The potential triggers of IRA might be Gram-negative bacteria emerging from genitourinary, gastrointestinal, and rarely respiratory tracts [2]. The pathophysiological hypothesis suggests that bacterial fragments such as lipopolysaccharide and nucleic acids in the systemic circulation might induce an immune response. Thus, activated cytotoxic T-cells could attack the synovium and other self-antigens through molecular mimicry [2]. Typically, the asymmetric oligoarthritis develops one to three weeks after a symptomatic infectious disease; however, in both sexes genitourinary infections might be asymptomatic [5]. Therefore, in specific group of patients the development of oligoarthritis without clear cause might be a symptom of serious underlying health problem.

Herein, we present a case of a woman with oligoarthritis, which has led to a discovery of “forgotten” intrauterine device (IUD).
80 mm/h, левкоцити 10.0/12.5 x 10^9/L, гранулоцити 7.5/9.1 x 10^9/L, C-реактивен протеин 183.8 mg/l, ALAT 79.3 U/L, GGT 158 U/L), ревматоиден фактор – отрицателен. Ултразвуковото изследване на рамо обективизира излив в субдептоидната бурса и частична рутура на сухожилието на м. суб-скапуларис. Започнало е лечение с нестериоидни противовъзпалителни средства и кортикостероид вътрескожно с известно подобряние. С оглед данните за IUD е проведена консултация с АГ специалист (фиг. 1), който препоръчва хистероскопия. След подписано информирано съгласие от страна на пациента при изследването се установява IUD в маточната кухина и стената на матката, като устройството е извадено лапароскопски. Доказан е хроничен ендометрит и цервицит. Включен е антибиотичен курс с последващо бързо нормализиране на състоянието (СУЕ 24 mm/h, левкоцити 6.8 x 10^9/L, гранулоцити 4.4 x 10^9/L, нормални чернодробни ензими). Болната и изливът в дясното рамо изчезват, като болната няма рецидивни олаквания през следващите три години.

**Обсъждане и заключение**

Настоящият клиничен случай описва диагнозата и лечението на АСИ, като състоянието е провокирано най-вероятно от IUD-свързан ендометрит и цервицит. Интраутеринните устройства осигуряват обратима, ефективна и безопасна контрацепция при оптимално съотношение ползариск. Тяхните основни предимства включват дългогодишна контрацептивна защита, липса на системни хормонални странични ефекти за разлика от пероралните комбинирани препарати, съдържащи естрогени и гестагени, както и много по-добри печеливи резултати при управление на състоянието на влагалищната влага и състоянието на влагалищната влага. Някои видове IUD са използвани не само за контрацепция, но и за други цели, като облагораждање на уретралното култура средно (фиг. 1). Прилагат се за лечение на различни уретренни инфекции и за възстановяване на балансираност между влагалищния и външния клон на уретралната функция.

**Discussion and Conclusions**

The presented case describes the IRA diagnosis and clinical management in a patient with chronic endocervicitis and IUD associated uterine inflammation. The intrauterine devices provide reversible, safe and effective contraceptive options with an optimal risk-benefit ratio. Their main advantages include the long-acting contraceptive protection, the avoidance of systemic side effects related to estrogen and progestin components of commonly used oral contraceptives as well as better adherence profile [6]. Some types of IUD have been used not only for...
Oligoarthritis associated with a “forgotten” IUD

Oligoarthritis, свързан със „забравена“...
penetration of the bowel or urinary tract, intestinal obstruction, small bowel or colonic fistula, as well as peritonitis [17]. To the best of our knowledge this is one of the few cases of aseptic arthritis associated with “forgotten” IUD. Unfortunately, we were not able to perform microbiological analysis of the IUD. Additionally, we did not investigate the HLAB27 status of the patient which could be helpful for the diagnosis of reactive arthritis.

Nevertheless, the presented case shows that asymptomatic genital infection should be considered in case of suspected IRA without clear etiological cause, especially in women with IUD-s, which have not been removed according to manufacturers’ recommendations. The in-depth training of patients regarding the proper use of contraception methods as well as the regular gynaecological examinations might help to prevent further similar cases.

The authors declare that the present article has not been submitted for publication or published in any other journal. None of the authors have any conflicts of interest regarding this article.

Библиография / References

13. Mezouar I, Abourazzak F, Aradoni N, Harzy T. Reactive arthritis induced by Gardnarella vaginalis. The Egyptian Rheu-

Submitted: 06.02.2017

Correspondence address:
Dobromir Tanev, MD, PhD
Department of Rheumatology
UMHAT „SofiaMed“ Block 2
10, D. Mollov, Str.
1797 Sofia
e-mail: do bri_tanev@yahoo.com