

Letter to the Editor

A Clinical Diagnosis Made Bench Side after Two Years

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Dear Editor in Chief

This short case presented below highlights the importance of Pathologists, whom are usually considered as bench side consultants, in diagnosing a case, which was not that unusual, but remained undiagnosed for almost 2 years due to lack of multidisciplinary approach by the referred clinicians.

A vaginal smear of a 40 year old female patient was received for evaluation with the history of lower abdominal pain and vaginal discharge since 2 years. Differential diagnosis of cervicitis/ vaginosis/ vaginal atrophy/ cervical cancer was being considered at this stage before proceeding for microscopy examination.

Microscopy revealed an adequate smear with no overt epithelial cell abnormality. However at places epithelial cells showed presence of clear round intracytoplasmic vacuoles with mild to moderate inflammation in background (Fig. 1). Presence of these vacuoles with no other abnormality aroused suspicion of vaginitis secondary to *Chlamydia trachomatis* infection. Possibility of human papilloma virus (HPV) infection was clearly ruled out due to lack

of perinuclear clearing of cytoplasm and any dysplastic changes in epithelial cells.

However diagnosis of *C. trachomatis* infection was still provisional as there were no confirmatory tests available. On further enquiry with the patient, it was revealed that she was having repeated on and off episodes of itching, redness, and watering of eyes since last 2 years, for which she regularly consulted an Ophthalmologist and got relieved of symptoms temporarily. Besides she gave history of pain in lower back and difficulty in bending down as well as climbing stairs since 2 years. These symptoms were also relieved partially on consulting an orthopedic doctor only to return back after few days. Further it was elicited that she was also having on and off fever since 2 years and was nulliparous with a history of spontaneous abortion at 2 months.

This classical clinical triad of cervicitis / vaginitis, conjunctivitis and arthralgia which emerged on detailed history taking pointed towards possibility of Reactive Arthritis or popularly called as Reiter's Syndrome, secondary to *C. trachomatis* infection.

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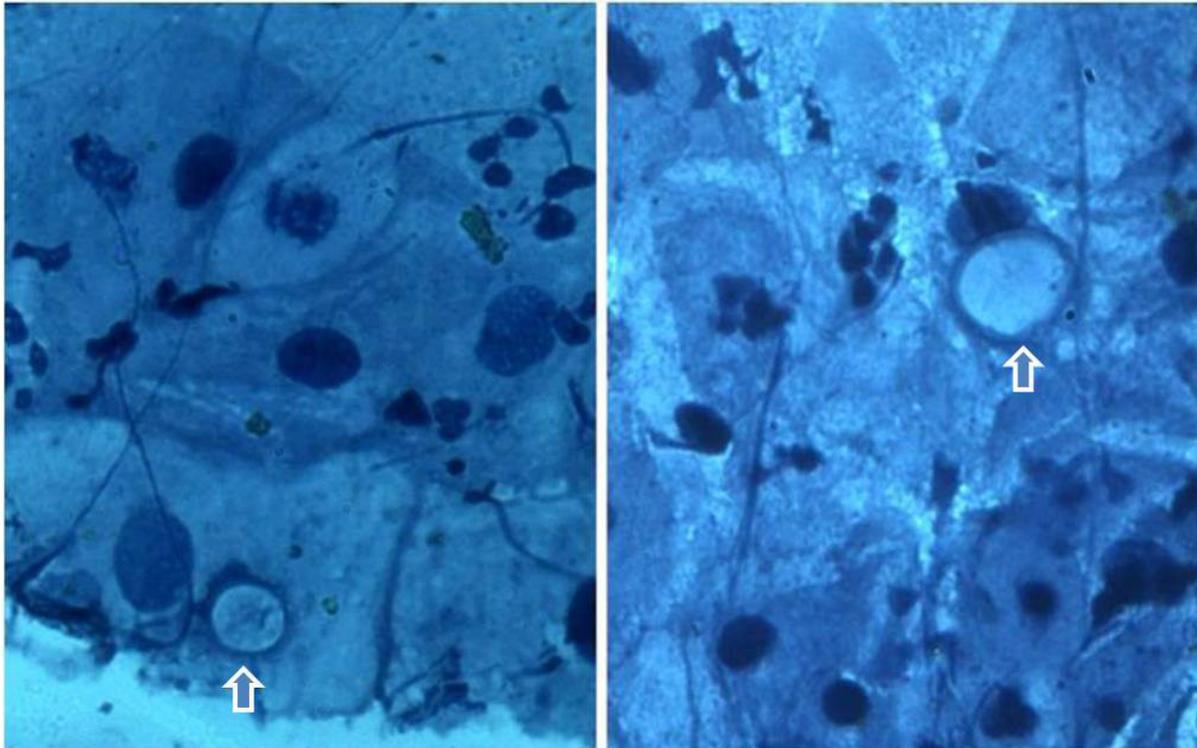


Fig. 1: showing clear round intracytoplasmic vacuoles adjacent to nuclei in epithelial cells with mild to moderate inflammation in background.

The patient was asked to consult her Gynaecologist back and was initiated on appropriate treatment in form NSAIDs and azithromycin to specifically target *Chlamydia*. Patient responded well to the treatment. Her complaints of lower abdominal pain and repeated conjunctivitis were completely cured off and she also reported of marked improvement of her symptoms of lower back pain, at follow-up of 2 months of initiating treatment. Though in this case, we were not able to perform demonstration of *Chlamydia* at molecular level which involves McCoy or HeLa cell cultures, but her prompt improvement in symptoms following targeted therapy, made us to believe that we were actually dealing a case of Reactive Arthritis secondary to *C. trachomatis* infection.

Reactive Arthritis is an infection induced systemic illness characterized by an aseptic inflammatory joint as well as eye involvement in a patient with infection located in a distant organ/system, most commonly genitourinary system (1). An ineffective immune system is considered responsible for the same (2). Very few studies are avail-

able relating association of *C. trachomatis* with this entity(3).

To conclude, this was a case in which, the Pathologist played an important role on forefront to diagnose an entity which was being missed by clinicians for about 2 years. Truly a pathologist is a “Consultant of Consultants”.

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