

349 Antibiotic therapy against female genital tract infection with Chlamydia trachomatis

Ryutaro MOTOMURA

Motomura women's clinic, Nagasaki

The basic and clinical efficacy of minocycline (MINO), josamycin (JM), ofloxacin (OFLX) and ciprofloxacin (CPFX) against genital tract infection with Chlamydia trachomatis was investigated. The following results were obtained.

1. The MICs₈₀ to 13 strains isolated from the uterine cervix were MINO 0.025, JM 0.2 OFLX 0.2 and CPFX 1.0 $\mu\text{g}/\text{ml}$.

2. Pharmacokinetic study was performed using one compartment model. The maximum level of the uterus and oviduct tissue after oral administration of MINO 100 mg was 1.7 and 1.6 $\mu\text{g}/\text{g}$, JM 400 mg (0.5, 1.4); OFLX 100 mg (2.2, 1.4); and CPFX 200 mg (1.1, 1.1).

3. Therapeutic efficacy rate at oral ordinary dose for 5 days was 50% (12 of 24 cases) for MINO, 15% (3 of 20) for JM; 66% (12 of 18) for OFLX; and 43% (7 of 16) for CPFX. Its efficacy of these drugs became 100% after administration of 15 days.

The above results indicated that administration of MINO or OFLX against Chlamydial genital tract infection was useful.

350 The Significance of Serum Antibody Titer in Infections with C. Trachomatis — With Special Reference to Pathologic Condition and Response to Therapy —. S. Matsuda, K. Oh and H. Hirayama, Department of Obst. and Gynec., Kohto Hospital, Tokyo.

In order to clarify the role of Chlamidia trachomatis (CT) in genital infection the patients were tested for CT antigen by chlamydiazyme (EIA) and antibody by ipazyme chlamydia assay, the significance of serum antibody titer and response to therapy was determined.

Results were as follows.

- 1) The rate of CT antigen positive pregnant women in the early pregnancy was 5.0% (17/341), and the rate of IgA antibody positives in normal pregnant women was lower, at 12.9% (25/194), compared to 20.2% (45/223) for women with abnormal pregnancy (e.g., abortion, ectopic pregnancy).
- 2) Of 116 patients with cervicitis (of whom 37.0% were positive for CT antigen) and 66 patients with PID (of whom 28.8% were positive for CT antigen), 50.3% (68/135) and 46.9% (31/66) were positive for IgA 16, respectively.
- 3) The clinical courses of 32 patients were followed, and they turned negative for antigen soon after therapy, but the IgA antibody titer was decreased in no more than a half of the patients even as late as 5 months after treatment.

351 Clinical evaluation in patients with chlamydia trachomatis (CT) infection to the female genitalia and alteration of IgG and IgA titer with treatment. M. Fujiwara, H. Koike, H. Yamauchi, S. Sawada, M. Sugiyama, I. Kohno, Dept. Obst. and Gynec. Kawasaki Medical School, Okayama.

The antigen (Ag) and antibodies (Abs) of CT were measured in 240 patients suspected CT infection. Culture and MicroTrack™ method were used for detection of Ag, and serum IgG, IgA, and IgM Abs were measured with microplate immunofluorescence antibody method. There was a discrepancy between detection of Ag and Ab titer in many cases, suggesting that measurement of both Ag and Ab is necessary to detect the CT infections. We found higher incidence of positive antigen in 39.3% of teen-age patients and in 26.9% of twenties. 40.7% of patients with sex transmitted diseases showed positive Ag. We also found some Ag-positive patients receiving sterility treatments indicating the requirement of examination of CT because CT may possibly be the cause of sterility. Use of 200 mg of either DOXY or MINO for 14 days eliminated all positive Ags quickly. Although IgG and IgA titer decreased gradually after treatment. IgA showed more rapid decay. This suggests that IgA reflected the effect of treatment more directly than other Abs but long-term follow was necessary to the entire eradication of Ab.