nosine might be compromised because the dosing schedule could allow for the emergence of didanosine resistance. For answers to these questions, large comparative clinical trials of mult-drug regimens containing once-daily or twice-daily didanosine dosing would be required.

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References


Colonization of the Female Genital Tract by Resistant Ureaplasma urealyticum Treated Successfully with Azithromycin

Ureaplasma urealyticum is a mycoplasma that has been implicated in a variety of obstetric problems including infertility, pregnancy loss, preterm labor, premature preterm rupture of amniotic membranes, and chorioamnionitis. In addition, the organism has been reported as a cause of congenital pneumonia, meningitis, and neonatal sepsis [1]. The relative risk of chronic lung disease in low-birth-weight infants is increased when U. urealyticum is recovered from endotracheal tube cultures [2]. In addition to the possible improvement of obstetric success, it has been suggested that eradication of U. urealyticum before conception should be undertaken to reduce neonatal morbidity and mortality [3]. We report a case of colonization with resistant U. urealyticum that was eradicated with azithromycin.

A 46-year-old gravida 3 woman presented with a history of recurrent pregnancy loss; she had had three consecutive spontaneous abortions, all during the first trimester. Evaluation revealed a history of maternal diethylstilbestrol exposure, chronic hypertension, a septate uterus, mosaicism for Turner’s syndrome, and a cervical culture positive for U. urealyticum. In addition to hysteroscopic correction of the uterine septum, the plan of care included an attempt to eradicate the cervical U. urealyticum colonization with doxycycline, 100 mg po b.i.d. for 14 days. Repeated cultures of the lower uterine segment and cervix by use of a lavage technique were persistently positive 4 weeks after completion of the treatment [4]. A second attempt to eradicate the organism was undertaken with ofloxacin, 200 mg po b.i.d. for 10 days. One week after completion of this second treatment regimen, repeated lower uterine segment and cervical cultures continued to yield U. urealyticum. The patient was sexually abstinent during the entire period of evaluation and treatment.

Because azithromycin has been successful for treatment of resistant Ureaplasma strains cultured from the endotracheal tubes of neonates, we decided to attempt a novel dosing regimen for the elimination of the organism from our patient’s genital tract. As there was no specific literature to guide this therapy, pediatric dosing was adapted consisting of a 10 mg/kg loading dose, followed by 5 mg/(kg·d). A 1-g loading dose of oral azithromycin was administered, followed by 500 mg po q.d. for 6 days, to complete a 7-day course of therapy. Two weeks after completion of the treatment, repeated cultures of the lower uterine segment and cervix were negative for U. urealyticum on two separate samplings, 72 hours apart. Liver transaminase and bilirubin levels remained unchanged during the course of therapy when compared with pretreatment levels.

Despite the fastidious nature of U. urealyticum, increasing resistance to conventional tetracycline therapy has been noted [5]. Due to changing susceptibility patterns, alternative therapies are necessary more often for the eradication of this organism. Fluoroquinolones have been used, but these drugs have serious limitations including gastrointestinal and CNS side effects, expense, potential teratogenicity if used in pregnancy, and a high treatment-failure rate [6].

Another therapeutic option is the macrolides, which have demonstrated efficacy in the treatment of cervicitis associated with U. urealyticum [7]. Theoretically, there are several benefits to azithromycin, an azalide antibiotic, over erythromycin including simplified once-daily dosing, a favorable side-effect profile, and superior tissue penetration [8].

To our knowledge, we describe the first case in which azithromycin has been used successfully to eradicate U. urealyticum from the female genital tract. There was one report [9] in which therapy with azithromycin, 1 g, given in a single oral dose was unsuccessful.
in eradicating \textit{U. urealyticum} from the genital tract. In the present case, however, azithromycin, at the dosage we report, was effective against a multidrug-resistant organism with a single 7-day course of treatment. If the expensive health outcomes of prematurity and chronic lung disease are factored into the analysis, the azithromycin treatment regimen described, although initially expensive (estimated cost, $75), may be cost-effective overall, as has been shown with treatment of infection due to \textit{Chlamydia trachomatis} [10]. Although more experience is clearly needed before firm conclusions can be drawn, it would appear that azithromycin, when appropriately dosed, may represent an excellent alternative therapy for the eradication of genital \textit{U. urealyticum}. Because of the drug’s superior acceptability among pregnant and preconceptual patients, it may eventually become a first-line therapy for this patient subset.

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References


Septic Arthritis Due to \textit{Aeromonas veronii} Biotype \textit{sobria}

\textit{Aeromonas} species are gram-negative, asporogenic, facultatively anaerobic bacilli. They tend to be isolated from freshwater and tap water, soil, marine animals, and nonfetal organic materials. Thirteen species have been identified. Only the motile species (\textit{A. hydrophila}, \textit{A. caviae}, \textit{A. veronii}, \textit{A. jandaei}, and \textit{A. schubertii}) are potentially pathogenic for humans [1]. The most frequent clinical presentations are infectious gastroenteritis and wound infections, generally due to \textit{A. hydrophila} [2]. Sepsis, usually caused by \textit{A. hydrophila}, is most frequently described in immunocompromised hosts [3]. Arthritis due to \textit{Aeromonas} species is rare; only five cases have been reported in the English-language literature [4–7], all of which were due to \textit{A. hydrophila}. We describe, to our knowledge, the first case of septic arthritis caused by \textit{A. veronii} biotype \textit{sobria}.

A 31-year-old male underwent orthotopic liver transplantation for end-stage cirrhosis. Immunosuppressive therapy consisted of cyclosporine and tapering doses of prednisolone. On posttransplantation day 10, he was treated with pulsed dosing of methylprednisolone because of acute severe rejection. On day 15, he presented with fever and pain in the left knee. The next day, findings on physical examination were normal except for a swollen, warm left knee. Significant laboratory findings included a WBC count of 3,800/mm$^3$ with 77% neutrophils, and a C-reactive protein level of 27 mg/L. Arthrocentesis yielded purulent fluid containing 104,000 leukocytes/mm$^3$ (89% neutrophils) without crystals. A gram stain did not show any bacteria. Three sets of aerobic and anaerobic blood cultures and one stool culture remained negative.

After 24 hours, a synovial fluid culture yielded gram-negative species with bacterial activity, pharmacokinetic properties and clinical efficacy. Drugs 1992;44:750–99.