An Original, Standardized, Emergency Department Sexual Assault Medication Order Sheet

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J Emerg Nurs 2005;31:271-5.

0099-1767/$30.00

doi: 10.1016/j.jen.2005.04.031

As a facet of a long-standing hospital-based program caring for sexual assault patients at the Massachusetts General Hospital's (MGH) emergency department, an interdisciplinary group created a standardized sexual assault adult medication order sheet. This original form is a comprehensive resource that follows sexually transmitted disease (STD) and HIV nonoccupational exposure recommendations from the Centers for Disease Control and Prevention (CDC) and Massachusetts Department of Public Health (MDPH). It also includes alternative medications in the case of allergies to first-line medications and features important commentary for clinicians.

When medications that follow CDC and MDPH guidelines are consistently ordered, the care of patients is improved, and the risk of liability lessens for nurses and physicians. Our institution is a level I trauma center with 80,000 annual visits. Approximately 60 to 80 sexual assault victims are seen each year. Although this number is small, we believed that providing excellent, standardized care to these patients was essential, particularly in light of the complicated forensic dimensions of these cases.

The perceived need for the order sheet stemmed from the fact that medications mandated by the CDC and the MDPH for sexual assault patients include a complicated array of prophylaxis for pregnancy, HIV, chlamydia, gonorrhea, hepatitis B, and trichomoniasis. Treatment is further complicated by many alternative antibiotic recommendations provided by the CDC and MDPH for patients who have allergies, and occasional updates depending on bacterial resistances and advancement in HIV medications. In an effort to clarify the treatment of sexual assault victims, our

medication sheet was created by the following group of health care providers: an emergency physician, a psychiatric clinical nurse specialist, an emergency nurse with a masters degree in forensic nursing, an emergency nurse who had previously served as the regional coordinator of the MDPH Sexual Assault Nurse Examiner Program, the physician director of the MGH STD clinic, the medical director of the STD Prevention Division at MDPH, and the ED nurse manager. The order sheet includes current medication guidelines in accordance with the CDC and MDPH; correct medication dosing; alternative but effective antibiotics for patients with allergies; commentary to direct MGH emergency physicians on dispensation; and recommended blood tests (Figure 1). The form was approved by the MGH Medical Records Committee and was initiated in the MGH emergency department on April 1, 2004.

Components of the medication order sheet

GONOCOCCAL INFECTIONS

Gonorrhea is caused by *Neisseria gonorrhoeae*, and prophylaxis is best accomplished using ceftriaxone, 125 mg intramuscularly. The additional 125 mg of the medication for the recommended total of 250 mg may help to cover incubating syphilis.[1] Ceftriaxone when administered intramuscularly can be a painful injection, and at our institution we often add 0.9 mL of 1% lidocaine to lessen the patient's discomfort. In Massachusetts, quinolones (eg, ciprofloxacin) are no longer recommended for gonorrheal prophylaxis because of the rise in quinolone resistance.[1]

If a patient is allergic to cephalosporins and there has been no pharyngeal contact during the assault, spectinomycin, 2 g intramuscularly, is recommended for gonorrhea prophylaxis. Because the medication accumulates in low concentrations in the pharynx, it is not useful for prophylaxis in an oral assault.[1] This injection is not effective against incubating syphilis. If the patient is allergic to cephalosporins and has been orally assaulted, azithromycin, 2 g by mouth, should be offered. This medication, however, should not replace ceftriaxone despite its less painful dispensation because it provides less coverage than ceftriaxone for gonorrhea.[1] Azithromycin is relatively expensive and the gastrointestinal adverse effects are high, so it is important to observe the patient after she or he takes azithromycin to ensure she does not vomit, and antiemetics can be offered. This 2 g dosage of azithromycin covers incubating syphilis.

CHLAMYDIAL INFECTIONS

Chalymdia is caused by *Chlamydia trachomatis*, and prophylaxis is best accomplished using azithromycin, 1 g by mouth × 1 or doxycycline, 100 mg by mouth twice a day for 7 days. The use of azithromycin may be preferred because of poor adherence to the weeklong regimen for doxycycline. Both agents are effective for vaginal, rectal, and oral assaults.[1] Azithromycin, 1 g, may prevent incubating syphilis but is less effective than the 2 g given for gonococcal prophylaxis. Doxycycline is effective against incubating syphilis. Although any antibiotic may adversely affect the efficacy of oral contraceptive pills. Doxycycline in particular is of concern. Any patients taking antibiotics who also are taking oral contraceptive pills should be advised to use another means of contraception for a month.

TRICHOMONIASIS

Trichomoniasis, a parasitic infection, is best treated with metronidazole, 2 g by mouth × 1.[1] Importantly, the medication's dispensation should be delayed if the patient has drunk alcoholic beverages within the past 48 hours because of the disulfram-like reaction that can occur: Metronidazole can cause the accumulation of acetalaldehyde in the presence of alcohol, leading to facial flushing, throbbing headache, palpitations, and vomiting. Patients who receive metronidazole in the emergency department should be advised to avoid drinking alcohol for 48 hours after taking the medication.

HEPATITIS B

Adults who have not been successfully vaccinated against hepatitis B or who have not had the disease should be vaccinated in the emergency department after undergoing a sexual assault. At our institution, we use the recombinant version (Recombivax). The CDC no longer recommends hepatitis B immunoglobulin for postexposure prophylaxis for exposure to hepatitis B if the source is unknown or unavailable for testing.[2] The vaccine series must be completed and titers should be checked.