Clues for suspecting a patient is infected with the HIV

This monthly series was developed from the AOA Task Force on AIDS Writers' Workshop, held August 16 to 18, 1991, in New York. The workshop was sponsored by an education grant from Burroughs Wellcome. It will provide brief clinical updates and perspectives on the human immunodeficiency virus (HIV). Readers may request tear sheets from the AOA editorial offices.

(Key words: AIDS, HIV infection, HIV transmission, infection control, communicable diseases, sexually transmitted diseases)

Question

What should make me suspect that one of my patients is infected with the HIV?

Answer

In the previous article in this series (JAOA 1992;92:234-235), we emphasized the need for taking candid and nonjudgmental sexual and behavioral histories as the basis for discerning patients at risk of becoming infected with the human immunodeficiency virus (HIV). Although this is clearly the most presumptive method for finding a possible HIV infection, acknowledgment of high-risk behavior will be denied by at least 5% of your patients, and, in other instances, a history will not be taken. In addition to taking the sexual and behavioral history, you will greatly enhance the probability of successfully detecting an infection by looking for new information during your routine medical history, physical examination, and laboratory assessments.

Features of the medical history that should

increase your index of suspicion include previous infections, such as other sexually transmitted diseases, recent herpes zoster infections (*Figure 1*), and an increase in the severity or frequency of other infections such as herpes simplex (*Figure 2*) or vaginal candidiasis. Other symptoms that warrant consideration of HIV disease include fever, weight loss, diarrhea, shortness of breath, and multisystem organ dysfunction.

The physical examination often can supply additional clues to underlying HIV infection. These clues can be picked up mostly in the examination of the lymph nodes, skin, and mucous membranes. While examining the mucous membranes, look for thrush (*Figure 3*), oral aphthous ulcers, oral hairy leukoplakia (*Figure 4*), and severe periodontal disease, in addition to chronic vaginitis in female patients. Look also for cutaneous abnormalities such as new or severe seborrheic dermatitis, psoriasis, onychomycosis, molluscum contagiosum (*Figure 5*), xeroderma, plantar warts (*Figure 6*), and Kaposi's sarcoma.

General laboratory findings that should raise your index of suspicion are unexplained anemia, neutropenia, and thrombocytopenia; low serum cholesterol concentration; increased serum lactate dehydrogenase and serum gammaglobulin levels; and serologic testing positive for syphilis. Unexplained lymphadenopathy is also a cause for concern.

These clues, appropriately integrated into your routine patient health screening considerations, will assist you in selecting those patients who should have an HIV antibody test. The information compiled in the baseline medical history data, physical examination assessments, and laboratory evaluations provides a

Figure 1. *Herpes zoster.*

Figure 2. *Herpes simplex.*

Figure 3. *Thrush.*

Figure 4. *Hairy leukoplakia.*

Figure 5. *Molluscum contagiosum.*

Figure 6. *Plantar warts.*

foundation to support you in determining a meaningful prognosis, anticipating and treating opportunistic infections, and appropriateness and timing for initiating antiviral therapy. Subsequent articles in this series will refer to these assessments within the context of patient management issues.

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Bibliography

Cohen PT: *The AIDS Knowledge Base: A Textbook on HIV Disease from the University of California, San Francisco & the San Francisco General Hospital*. Boston, Massachusetts Medical Society, 1990.

Sande MA, Volberding PA: *The Medical Management of AIDS*, ed 2. Philadelphia, Pa, WB Saunders Co, 1991.

HIV resource file AIDS/HIV hotlines

□ Centers for Disease Control National AIDS Hotline

1-800-342-AIDS (English)
1-800-344-SIDA (Spanish)
1-800-AIDS-TTY (Deaf Access)
(919) 361-8425 (Fax)

□ National AIDS Clearinghouse

PO Box 6003
Rockville, MD 20849-6003

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(301) 217-0023 (International)
1-800-243-7012 (Deaf Access)
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—Clinical Trials and Drug Information
1-800-TRIALS-A

□ National Sexually Transmitted Diseases Hotline/American Social Health Association 1-800-227-8922

□ National Gay Task Force AIDS Information Hotline

1-800-221-7044
(212) 807-6016 (New York State)

Information Sources

□ US Public Health Service Public Affairs Office

Hubert H. Humphrey Building
Room 725-H
200 Independence Ave, SW
Washington, DC 20201
(202) 245-6867

□ Local Red Cross or American Red Cross AIDS Education Office

1730 D St, NW
Washington, DC 20006
(202) 737-8300

□ American Association of Physicians for Human Rights

PO Box 14366
San Francisco, CA 94114
(415) 558-9353

□ AIDS Action Council

729 Eighth St, SE
Suite 200
Washington, DC 20003
(202) 547-3101

□ Gay Men's Health Crisis

PO Box 274
132 West 24th St
New York, NY 10011
(212) 807-6655

□ Hispanic AIDS Forum

c/o APRED
853 Broadway
Suite 2007
New York, NY 10003
(212) 870-1902 or 870-1864

□ Los Angeles AIDS Project

7362 Santa Monica Blvd
Los Angeles, CA 90046
(213) 876-AIDS

□ Minority Task Force on Aids

c/o New York City Council of Churches
475 Riverside Dr, Rm 456
New York, NY 10115
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CLINICAL PHARMACOLOGY The mechanisms by which METROGEL acts in reducing inflammatory lesions of rosacea are unknown, but may include an anti-bacterial and/or an anti-inflammatory effect.

INDICATIONS AND USAGE METROGEL is indicated for topical application in the treatment of inflammatory papules, pustules, and erythema of rosacea.

CONTRAINDICATIONS METROGEL is contraindicated in individuals with a history of hypersensitivity to metronidazole, parabens, or other ingredients of the formulation.

PRECAUTIONS Because of the minimal absorption of metronidazole and consequently its insignificant plasma concentration after topical administration, the adverse experiences reported with the oral form of the drug have not been reported with METROGEL.

General METROGEL has been reported to cause tearing of the eyes. Therefore, contact with the eyes should be avoided. If a reaction suggesting local irritation occurs, patients should be directed to use the medication less frequently, discontinue use temporarily, or discontinue use until further instructions. Metronidazole is a nitroimidazole and should be used with care in patients with evidence of, or history of, blood dyscrasia.

Drug Interactions Drug interactions are less likely with topical administration but should be kept in mind when METROGEL is prescribed for patients

who are receiving anticoagulant treatment. Oral metronidazole has been reported to potentiate the anticoagulant effect of coumarin and warfarin resulting in a prolongation of prothrombin time.

Carcinogenesis: Tumorigenicity in Rodents Metronidazole has shown evidence of carcinogenic activity in a number of studies involving chronic, oral administration in mice and rats but not in studies involving hamsters. These studies have not been conducted with 0.75% metronidazole gel, which would result in significantly lower systemic blood levels than oral formulations.

Mutagenicity Studies Although metronidazole has shown mutagenic activity in a number of *in vitro* bacterial assay systems, studies in mammals (*in vivo*) have failed to demonstrate a potential for genetic damage.

Pregnancy This drug should be used during pregnancy only if clearly needed.

Nursing Mothers Even though METROGEL blood levels are significantly lower than those achieved after oral metronidazole, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use Safety and effectiveness in children have not been established.

ADVERSE REACTIONS Adverse conditions reported include watery (tearing) eyes if the gel is applied too closely to this area, transient redness, and mild dryness, burning, and skin irritation. None of the side effects exceeded an incidence of 2% of patients.

DOSAGE AND ADMINISTRATION Apply and rub in a thin film of METROGEL twice daily, morning and evening, to entire affected areas after washing. Significant therapeutic results should be noticed within three weeks. Clinical studies have demonstrated continuing improvement through nine weeks of therapy.

Areas to be treated should be cleansed before application of METROGEL. Patients may use cosmetics after application of METROGEL.

HOW SUPPLIED METROGEL (0.75% metronidazole) is supplied in a 1 oz. (28.4 g) aluminum tube - NDC 55326-100-21.

Caution: Federal law prohibits dispensing without a prescription.

STORE AT CONTROLLED ROOM TEMPERATURES: 59° to 86° F; 15° to 30° C.

Consult package insert for full disclosure. Package insert issued 10/88.

References:

1. Independent market research shows dermatologists prescribe MetroGel for rosacea more often than any other medication. Data on file, Curatek Pharmaceuticals, 1991.
2. Bleicher PA, Charles JH, Sober AJ. Topical metronidazole therapy for rosacea. *Arch Dermatol.* 1987; 123:609-614.
3. Aronson IK, Rumsfield JA, West DP, Alexander J, Fischer JH, Paloucek FP. Evaluation of topical metronidazole gel in acne rosacea. *Drug Intell Clin Pharm.* 1987;21:346-351.
4. Lowe NJ, Henderson T, Millikan LE, Smith S, Turk K, Parker F. Topical metronidazole for severe and recalcitrant rosacea: a prospective open trial. *Cutis.* 1989;43(3):283-286.

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