Proposals for Venereal Disease Research-Fenway Community Health Center 12/80

The following thoughts represent some of the issues that are still not optimally clear in the management of sexually transmitted illnesses, and are areas in which I feel the Fenway Community Health Center can make an important, and in some cases unique, contribution to better comprehension and patient care. One particularly useful set of articles which helped me update my data base in this area are published in the spring 1980 issue of the Journal of Homosexuality, pages 281-333, where there are synopses of papers delivered at the Conference of Current Aspects of Sexually Transmitted Diseases, June, 1979. Another useful (and free) resource is the biannual Sexually Transmitted Diseases-Abstracts and Bibliography available from the CDC, Atlanta, GA. 30333. The projects listed below are outlines, sketchy, by definition and I'd be more than happy to discuss details with anyone interested before, or during, the 12/14 meeting.

Ken Mayer telephone: 232-9861 (home) 732-8611 (page #, work)

Gonorrhea

Background: 1/5 of the patients screened at the Howard Brown Memorial Clinic in Chicago had GC. About 5% of men screened at a mobile site had(+) cultures. At the tubs, asymptomatic screenees showed rates of 5% oral, 8% rectal, and 1% (+) urethral GC cultures; the latter figure contrasts with the estimate that Fiumara gives of 10% asymptomatic urethral GC in Massachusetts, so our comparative epidemiology is important in assessing how universal the Howard Brown rates are. They also found that when folks came in for VD screening that 86% of pts. with pharyngeal GC had no symptoms; 61% of pts. screened in the clinic (+) for rectal GC denied symptoms. If we have this great a discrepancy between clinic and baths, it is worth noting. Analysis of our own gonorrhea epidemiology will enable us to answer many other questions regarding the biology of the disease and its causative organism-e.g. -what are the presenting symptoms of rectal GC, and their frequency- asymp. vs. profuse discharge, vs. pain on defecation vs. blood in the stool. the same with pharyngeal-e.g. sore throat vs. swollen glands vs. asymp. etc.

-how often do men and women present with disseminated gonococcal disease?

-how many of our supposedly positive GC isolates are actually meningococus, and are the patients clinically different from those with true GC? Do any of them get' meningococcemia? Do they respond to conventional anti-GC medication as well? (work in this area would involve cooperation with the State Lab, which should be no prob.)

-what are the complications that our patients with GC have-e.g. epididymitis, salpingitis, prostatitis, subsequent nonspecific urethritis, arthritis?

-what is the percentage of co-existent syphillis found in GC screening? Do these symptomatic with GC differ from those who are asymptomatic?

-several gonococcal vaccines are being developped (see Sept. 5, 1980 issue of Science, vol. 209, pages 1103-1106) , do we want to be involved with the clinical trials of this?

-Gonococcal prophylaxis regimes. King Holmes of U. Wash., Seattle, has found that both minocycline and doxycycline given as single doses after multiple partner sex may decrease the incidence of GC; this hasn't been done with large group of people. Other drugs may do the job more cheaply and with less side effects (e.g. ampicillin), so a clinical study is in order.

-which patients are treatment failures? do we have any penicillinase-resistant organisms or other difficult to eradicate strains (check with State Lab). If any of our organisms have unique antibiotic sensitivities, I can arrange to have them analyzed for free at the Brigham Microbiology Lab to see if there are any potentially dangerous plasmids on board which could mediate an outbreak of resistant strains.

-Comparison of newer treatment regimens for gonorrhea- (1) comparison of efficacy of the newer cephalosporins-cefmandole, cefuroxime, and cefaclor. (2) treatment regimens for pharyngeal GC (hard to eradicate) e.g. bactrim (3) spectinomycin alone versus spec. and penicillin for rectal GC, as some researchers are now advocating.

- rectal gram stains - how much more useful than culture in dx. of GC proctitis.

Syphillis

-frequency of primary, secondary, tertiary? what have been the presenting symptoms and signs? how many asymptomatic?

3. Syphillis (cont.) Mayer

-how many of the patients we screen have false positive tests for syphillis?

-any treatment failures, why?

-incidence of Jarisch-Herxheimer reaction?

Nonspecific Urethritis

-is the incidence of this less common among gay men than gonorrhea, and less common in the local straight community, as Holmes found in Seattle?

-how often is it post-gonococcal?

-how effective is tetracycline at eradication? how often do people relapse and how often are longer courses of the same drug effective at last versus changing to another agent? Does probenecid help when rxing GC in preventing NSU? as some claim?

-Holmes found that around 50% of NGU in straights was caused by chlamydia or ureaplasma, but that the incidence was less in gays; in cooperation with the State Labs, we could culture for these organisms as well as enteric organisms (which may have a higher incidence in gay men because of fucking as a mode of transmission), to do the first definitive study of nonspecific urethritis in the gay community. It could mean that the agent of choice for NSU would be amoxicillin, etc. or who knows....

-how frequently are complications of nonspecific urethritis seen-e.g. arthritis, epididymitis, urethral strictures, prostatitis? Do specific bugs have predilections for specific problems?

Trichomoniasis

-what is the incidence of this infection among lesbians? the patterns of transmission among gay women are not well known and deserve attention. is it seen in gay men as a cause of nonspecific urethritis?

-there are some newer techniques which the CDC might be interested in subsidizing to see if they are cost effective; (1) using acridine orange fluorescent microscopy to identify the organisms on a slide (2) culturing on cysteine-peptone-liver-maltose medium.

-comparison of various treatment regimens, e.g. single dose metronidazole vs. 5-7 day course.

Condyloma Accuminatum

-prevalence in clinic population. patterns of illness. relationship to anal intercourse. relationship to getting other viral infections.

-efficacy of various treatment regimens: cryo, podophyllum, bichloroacetic acid, laser, topical SA and newer topical agents. controlled trials?

Herpes

-types of presentation. frequency of recurrence. clinical trials of various treatment regimens; Lupidon (a German-made anti-herpes vaccine, just being tried in Europe), methylene blue topically, influenza vaccine (reported to goose immune response against herpes- J.B. Miller Annals of Allergy 42:295, 1979).

Enteric Diseases

Background-Dan William of the Gay Men's Health Project in NYC says that there is a 12% asymptomatic rate of giardia and amebiasis- if this is true here and in other major urban centers, the implications are significant. how directly is it related to rimming versus other anal contact? (This last question has major implications re; pt. education-may be easier to discourage rimming than screwing)

-what have been the presentations of our pts. with giardiasis and amebiasis-e.g. blood or mucus in stool, diarrhea, malabsorption, flatulance, asymp. etc?

-where is the disease acquired? multicontact? trips to the Caribbean, Mexico, Colorodo?

-how many people relapse after a week of metronidazole? are other rxs. more effective e.g. diodohydroxyquin?

-frequency of other enteric pathogens: salmonella, shigella, campylobacter, yersinia.

Hepatitis

-incidence? breakdown of A. vs B. vs nonA-nonB? differences in symptoms and outcomes? relation to various anal sex acts.

-incidence of Hep B persistant (+). chronic active hepatitis incidence.

-vaccine trial versus current multi-center study of high risk Boston hospital workers.

Scabies and Pediculosis

-incidence. patterns of acquisition. resolution of sx's with Kwell. trial versus newer agents, e.g. synergized pyrethin liquid, which supposedly only has to be on the pt. for 1-2 hours.

Miscellaneous

-strategies for the management of vaginitis.

-candidiasis. success of various treatment regimens-comparison.

-hemophilus vaginalis-incidence. symptoms. comparison of treatment regimens between metronidazole, ampicillin, and tetracycline.

-incidence of genital cytomegalovirus infection.

-bacterial etiologies of acute epididymitis.

-other rare venereal diseases: chancroid, granuloma inguinale, lymphogranuloma venereum. do we ever see them?

Patient education

-would an intensive education in sexually transmitted dieases cause a decrease in frequency of specific illnesses when targetted to gay people? how much teaching in a specific course would be necessary to acause a demonstrable decrease in VD?

Computer utilization

-what ways can we think of utilizing the computer to maximize our information retrieval network?

-the CDC might be willing to subsidize networking with them and other clinics, perhaps also with the State Lab.