

## **Presumptive specific clinical diagnosis of genital ulcer disease (GUD) in a primary health care setting in Nairobi**

### **Abstract:**

Of 22,274 patients 12 years of age or older attending a primary health care clinic in Nairobi, 1076 (4.8%) complained of symptoms suggesting a sexually transmitted disease (STD). Of these, 518 females and 462 males underwent complete clinical evaluation, and 78% had objective microbiologic or clinical evidence of STD, including 168 (17.1%) with genital ulcer disease (GUD). Presumptive specific clinical diagnoses on initial physical examination in cases of GUD were chancroid (131 patients), syphilis (25), genital herpes (15) and lymphogranuloma venereum (LGV) (1). Clinical diagnoses correlated only weakly with microbiological and serological diagnoses. *Haemophilus ducreyi* was isolated from 51 (41%) of the 125 with a clinical diagnosis of chancroid, and 4 (22%) of 18 with a diagnosis of syphilis, herpes, or LGV ( $P = 0.13$ ). The rapid plasma reagin (RPR) test was reactive in 6 (24%) of 25 with a clinical diagnosis of syphilis, 18 (12.3%) of 146 with a diagnosis of chancroid or herpes, and 37 (4.7%) of 786 without a genital ulcer ( $P < 0.001$ , GUD vs no GUD). Sensitivity, specificity, and positive predictive value for presumptive clinical diagnosis of chancroid, relative to *H. ducreyi* isolation, were 93%, 16%, and 41%; and for diagnosis of syphilis, relative to reactive RPR, were 25%, 88% and 25%. Specific treatment based on presumptive specific clinical diagnosis frequently was inadequate for syphilis among patients with GUD and reactive RPR test. Syndromic treatment of GUD with antimicrobial combinations active against both chancroid and syphilis would be preferable to treatment with single drugs based on presumptive specific clinical diagnoses for this population. PIP: During a 12-month period in 1990-1991 in Kenya, 1076 of 22,274 patients (4.8% of all patients over 12 years of age) presented at the Langata Health Center in Nairobi with symptoms of a sexually transmitted disease (STD). Researchers analyzed data on 980 of these patients whose records had complete data to assess the use of presumptive specific clinical diagnosis in the management of STDs in a primary health clinic. 17.1% (168) had genital ulcer disease (GUD). Men were more likely to have a GUD than women (24.7% vs. 10.4%). *Haemophilus ducreyi*, the etiologic agent of chancroid, was isolated in the cultures of 40% of the patients with a presumptive specific clinical diagnosis of chancroid compared with 17% of those with a presumptive specific clinical diagnosis of syphilis, herpes, or lymphogranuloma venereum (LGV) ( $p = 0.02$ ). The clinical diagnoses of these two GUDs had only a weak correlation with microbiological and serological diagnoses ( $p = 0.13$ ). 24% of patients with a presumptive specific clinical diagnosis of syphilis, 31% of those with a presumptive specific clinical diagnosis of chancroid, 6% of those with a specific clinical diagnosis of genital herpes or LGV, and 4.7% of those who had no GUD disease tested positive for syphilis ( $p 0.001$ , GUD vs. no GUD). Among patients with syndromic diagnosis of GUD, the presumptive specific clinical diagnosis of chancroid had a high sensitivity (91%), low specificity (24%), and low positive predictive value (40%). Among patients with syndromic diagnosis of syphilis, the presumptive specific clinical diagnosis of syphilis had a low sensitivity (25%), higher specificity (87%), and low positive predictive value (24%). 13% of patients with positive cultures for *H. ducreyi* did not receive a recommended or effective drug for chancroid. 82% of patients who tested positive for syphilis did not receive a recommended drug for syphilis. Based on these findings, the researchers conclude that syndromic treatment of GUD with use of antimicrobial combinations

active against both chancroid and syphilis is a better course of treatment than use of single drugs based on presumptive specific clinical diagnoses for this population.