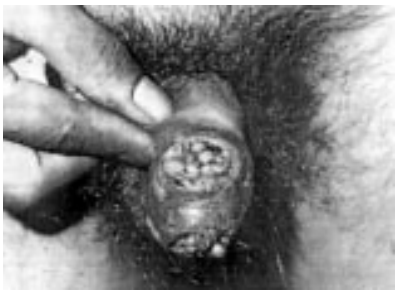

Figure 1 Dorsal perforation of the prepuce through which multiple papulonodular, warty lesions are visible.

developed small papular lesions on the glans penis. Lesions enlarged rapidly and started eroding the undersurface of the prepuce. Finally, 3 months later, the prepuce was perforated. Examination revealed a large, circular defect on the dorsal aspect of the prepuce through which multiple papulonodular, warty lesions were visible (fig 1). Warty lesions were also visible all around the preputial opening. On retraction of the prepuce (which was difficult), the whole glans penis, corona, and frenulum and undersurface of the prepuce were studded with multiple warts varying in size from 2 mm to 1.5 cm. The surface of the lesions was verrucous. Histopathological examination of one of the warty lesions showed features consistent with condyloma acuminatum. Serology for HIV and syphilis were negative.

In our earlier report all patients with dorsal preputial perforation had ulcerative diseases involving genitalia. Maite and Hay[2] earlier reported a patient with genital warts treated with topical podophyllin, who presented later with perforation of the dorsal surface of prepuce. They considered it as delayed podophyllin damage. Our patient had not been treated before with podophyllin. The identical presentation in our and the reported patient suggests that warts themselves and not podophyllin are responsible for perforation. Condylomas particularly in immunocompromised individuals may attain a very large size and rarely become locally invasive and destructive.[3] In our patient, however, condylomas were not very large and there was no evidence of immunosuppression.

Our patient had condylomas all over the glans, but perforation took place only on the dorsum of the prepuce, confirming that this site is more susceptible to this complication.

Incidentally, two more patients with perforation on the dorsal surface of the prepuce as a complication of chancroid and genital herpes have been depicted in *A colour atlas of AIDS in the tropics*.[4] Both patients were HIV seropositive. This suggests that this complication is not uncommon (though underreported), more so in tropics. HIV infection by altering the course and severity of genital lesions of sexually transmitted diseases probably makes this complication more frequent. Out of the 10 patients reported/published, half were HIV seropositive.

SOMESH GUPTA
BHUSHAN KUMAR
Department of Dermatology, Venereology and Leprology, Postgraduate Institute of medical Education and Research, Chandigarh 160 012, India

Correspondence to: Dr Bhushan Kumar
kumarbhushan@hotmail.com

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Urine proves a poor specimen for culture of *Trichomonas vaginalis* in women

EDITOR,—*Trichomonas vaginalis* infection occurs worldwide with an incidence of over 200 million infections per year.[1] Clinical disease in women ranges from asymptomatic to severe vaginitis, and has been associated with preterm delivery[2] and an increased rate of HIV-1 transmission.[3]

The magnitude of *T vaginalis* associated morbidity, including risk of HIV-1 transmission, makes simple accurate diagnosis important especially in at-risk populations. Microscopic examination of a wet mount vaginal specimen is easy to perform but only identifies 40–60%[4] of infections in comparison to culture. The In-pouch culture system (Biomed Inc, San Jose, CA, USA) is reported to be equally sensitive yet more practical than traditional culture methods.[5] If proved sensitive, culturing of urine from female patients for *T vaginalis* might prove useful in population based screening programmes, field investigations, or individual circumstances when a patient might not want a genital examination. Therefore, we set out to determine the sensitivity of culturing urine from women in comparison with a self collected vaginal swab for identification of *T vaginalis*.

We recruited subjects from a randomised community study that investigated the prevalence of sexually transmitted infections in women with and without access to female condoms.[6] In this particular substudy we obtained specimens from participants in two study sites. Participants were instructed by one of the study nurses how to obtain a self collected vaginal swab and at the same time collect urine. Women were asked not to clean the genital area before providing both specimens. Immediately after collection the vaginal swab was inoculated into the In-pouch and urine was spun at 2000 *g* for 10 minutes. After the supernatant was discarded, the sediment was agitated and pipetted directly into the In-pouch. Specimens were shipped at room temperature to the University of Nairobi and incubated at 37°C for up to 5 days according to manufacturer's instructions. Daily microscopic examination was performed for identification of *T vaginalis*. Random specimen coding ensured that laboratory staff remained blind to specimen source and pairing.

We recruited 675 women for this substudy. *T vaginalis* was detected by culture in 121 (17.9%) women per self collected swab and 23 (3.4%) women per centrifuged urine. In comparison with culture of self collected swab, culture of centrifuged urine yielded a sensitivity of only 17% and a specificity of 99.6% (table 1). We originally intended to recruit over 2000 women into the study, but discontinued recruitment when preliminary results clearly demonstrated the inadequacy of urine for culturing *T vaginalis* in women.

In this large scale community study we found culture of centrifuged urine very insensitive for identification of trichomonads in women. Since only 5–10 organisms in a sample are necessary for a positive culture,[5] these findings were unexpected. We cannot fully explain why culture of urine for *T vaginalis* in women proved so poor. Because of contamination of the external genitalia with vaginal fluid, a first void urine specimen might have proved a better sample.

Table 1 Comparison of culture for T vaginalis from centrifuged urine and self collected vaginal swab in 675 women

	T vaginalis urine culture		
	Negative	*Positive*	*Total*
T vaginalis self administered vaginal swab			
Negative	552	2	554
Positive	100	21	121
Total	652	23	675

Kappa = 0.256.

Supported by the United States Agency for International Development, Family Health International and a grant from the National Institutes of Health (AI31448). Biomed Inc donated the In-pouch for this investigation.

Contributors: OAM helped design and oversee the study, assisted with analysis of the data, and drafted the manuscript; CRC designed the study protocol, analysed the data, and supervised preparation of the manuscript; DK assisted with the design and supervision of the study, and assisted with manuscript preparation; MK assisted with the design and supervision of the study, and assisted with manuscript preparation; JO performed the culture of *T vaginalis*, and assisted with manuscript preparation; JJB oversaw the laboratory aspects of the study, was co-principal investigator of the parent study, and assisted with manuscript preparation; MW was a co-investigator of the parent study and assisted in manuscript preparation; PJF was the principal investigator of the parent study and assisted with manuscript preparation.

OMARI A MOHAMED
Department of Medical Microbiology, University of Nairobi, Nairobi, Kenya and Family Health International, Nairobi, Kenya

CRAIG R COHEN
Department of Medical Microbiology, University of Nairobi, Nairobi, Kenya and Department of Obstetrics and Gynecology, University of Washington, Seattle, Washington, USA

DORCAS KUNGU
Department of Medical Microbiology, University of Nairobi, Nairobi, Kenya

MAUREEN A KUYOH
Family Health International, Nairobi, Kenya

JAMES A ONYANGO
JOB J BWAYO
Department of Medical Microbiology, University of Nairobi, Nairobi, Kenya

MIKE WELSH
Family Health International, Nairobi, Kenya

PAUL J FELDBLUM
Research Triangle Park, North Carolina, USA

Correspondence to: Craig R Cohen, MD, MPH, Department of Obstetrics and Gynecology, University of Washington, Box 356460, Seattle, WA 98195, USA

crcohen@u.washington.edu

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Guidelines for serological testing for syphilis

EDITOR,—In our area the high HIV prevalence has made the interpretation of syphilis tests paticularly problematic. Coinfected patients do appear to reactivate their treponemal infection or possibly reinfection with a different "strain" in the presence of profound immunosuppression. As with some other agents IgM can persist for several years with peaks and troughs. Non-treponemal tests are uniformly negative while TPHA levels can fluctuate widely. It is perhaps unfortunate that reference laboratories may have developed their algorithms in the face of conventional syphilis diagnosis—these do little to help with HIV coinfected patients.

DENIS J McELBOROUGH
Public Health Laboratory, Royal Sussex County Hospital, Eastern Road, Brighton, UK
DMCELBO@aol.com

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Sexually transmitted infections and risk behaviours in women who have sex with women

EDITOR,—While it is comforting that some research is finally being carried out in depth on the risk of STIs among women who have sex with women (WSW),[1] any conclusions drawn from this study for WSW in general need to be handled with a great deal of caution when one looks at the make up of the subjects and controls.

For example, over twice as many of the WSW as the control group were current sex workers; 38% of the WSW had had a previous termination of pregnancy; nearly six times as many of the WSW had a history of injecting drug use.

The researchers themselves say their "clinic population . . . may not be representative of the WSW in the general community." This is an understatement—and any reporting of this study must make very clear statements about the dangers of inappropriate conclusions about STIs among women who have sex with women generally.

L SEMPLE
Lothian Health Board, Scotland
linda.semple@lhb.scot.nhs.uk

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BOOK REVIEWS

Lower Genital Tract Precancer. 2nd ed. By Albert Singer, John M Monaghan. £135.00; Pp 323. Oxford: Blackwell Science, 2000. ISBN 0632047690.

It is 6 years since the first edition of this book and the expansion in knowledge about lower genital tract precancer is reflected in the addition of an assistant and a contributing author, as well as an increase in the number of pages (from 254 in the first edition to 323 in the present one).

The extra input and space has been used to maximal effect with the book losing none of its attractions of appearance, content, and even texture by its use of high quality paper.

The addition of a chapter on the role of human papilloma virus in lower genital tract neoplasia makes the book more rounded. This chapter is comprehensive as well as excellently presented and very up to date. I appreciated the section on the role of oncogenic HPV detection in the prevention of lower genital tract precancer, although this naturally concerned CIN rather than VIN or VaIN.

I would have preferred chapter 5 (Cytology and screening for cervical precancer) to follow chapter 2 (HPV in the pathogenesis of lower genital tract neoplasia) and then the more practical aspects of colposcopy itself would not be interrupted. This is a small criticism of an otherwise comprehensive and logical content.

The chapter on the management of cervical precancer is a delight to read and see, with the section devoted to HIV positive women reflecting most shades of reliable opinion in this developing field. HIV is again included in the chapter on VIN.

GU colposcopists will be particularly interested in the final chapters on infective conditions causing confusion in diagnosis of lower genital tract precancer. It is easy to quibble with some the statements of management of the infections noted (cervical warts do not even merit a mention of treatment) but that is not the remit of the book.

The illustrations are gorgeous throughout and the line drawings are used to very good effect. The overassiduous book critic might mention the data left on some colposcopic photographs, the venerable laser machine showed on page 171 and whether the speculum is correctly placed on page 36, but not me.

This is a "must buy." It's a big book (in size, content, and price) which should form the nucleus of the colposcopist's library.

D A HICKS
Royal Hallamshire Hospital, Department of Genitourinary Medicine, Glossop Road, Sheffield S10 2JF

Congenital and perinatal infections prevention, diagnosis and treatment. Ed by Marie-Louise Newell, James McIntyre. £37.95; Pp 342. Cambridge: Cambridge University Press, 2000. ISBN 0 521 78979 6.

I liked this book. An alternative title could be "An evidence based review of prevention, diagnosis, and treatment of congenital and perinatal infection." The editors, both recognised experts in perinatal infection, persuaded an international panel to provide up to date reviews of particular perinatal infections with key references up to 1999/2000. Despite clearly a short production time an inevitable weakness is that new data have become available after going to press. To keep costs down there are few illustrations and a lot of text. However, tables are widely used and the text is well broken up. One third of the book is devoted to references, so all the text is strongly evidence based, and statements are not based on authors' opinion but on published literature.

There is an excellent introduction on the interaction between pregnancy, immunity, and infection and a thorough discussion on maternal infections and their consequences. This section ends with a review of the pitfalls and benefits of screening for antenatal infections including an excellent summary of the potential biases involved in setting up and evaluating screening programmes.

The second section is a traditional whizz through the standard common infections in pregnancy. Highlights include Forsgren and Malm's excellent chapter on herpes simplex infection, and Mandelbrot and Newell's thorough review of vertical transmission of hepatitis viruses. I was disappointed to see no detailed discussion of HTLV-I infection or a more detailed review of the role of perinatal infections in cerebral palsy.

Two other criticisms could be a relative lack of assessments of cost effectiveness of screening programmes already in place and for the future. The introduction of new screening programmes and the retention of existing screening programmes—for example, syphilis and rubella, need to be increasingly driven by cost-benefit analysis. It would also be interesting to have had some speculation about why different infections have such different vertical transmission rates and have their impact at different stages of pregnancy.

Overall, the strength of this book lies in its literature reviews. It is an extremely good summary of where we are at with perinatal infections in the year 2000. Who will find it useful? It is a postgraduate text, too detailed for undergraduates. It should be compulsory reading for obstetricians in training. I would recommend it to perinatologists, obstetricians, and genitourinary medicine physicians. It is a practical text with dosages, immunisation schedules, and treatment algorithms. It is reasonably priced. There are larger textbooks on perinatal infections costing £200, so this fills a gap in the market. Buy it and you won't be disappointed.

M SHARLAND
Department of Paediatrics, St George's Hospital, London SW17

Condoms. Edited by Adrian Mindel. £19.95; Pp 230. London: BMJ Books, 2000. ISBN 9780727912671

Considering we inquire about or promote the use of condoms with each and every patient we see in GU/HIV clinics, it's extraordinary how little we know about them. "Penis protectors" have come a long way since they were used in battle, cast to size, and made from goat bladder, although "natural" condoms can still be obtained today from the caeca of New Zealand lambs. Thanks to Charles Goodyear, the birth control movement, and the HIV epidemic the condom has enjoyed a renaissance and with more strin-