

ascending genital tract infection and its permanent sequelae. If the partners were pregnant, there would also be risk of neonatal infection.

This small study has caused concern as (a) it reinforces the problem of the asymptomatic shedder of *Chlamydia trachomatis* in the male population (about 15% in this series), and (b) if these data are reproducible, on the first attendance as many as 16% of male patients may have this common and potentially serious sexually transmitted disease, which is missed by conventional diagnostic methods. The above results suggest that 30% of infected men would be missed in departments that use >10 PML/field,<sup>2</sup> although the two glass urine test may identify some of these cases.

The journal has, over the years, paid much attention to the diagnosis of non-specific urethritis in men. We wonder whether looking at isolation positive cases and referring back to microscopy may be of interest to our colleagues, and in particular ask whether colleagues with full chlamydial diagnostic services have made similar observations. Should the results of this study be supported by other centres, full diagnostic facilities should be made available urgently to all genitourinary departments as a matter of public health necessity. Failure to achieve early diagnosis in men means failure to prevent female tubal occlusive infertility, ectopic pregnancy, chronic pelvic pain, and avoidable neonatal disease.

Yours faithfully,

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#### References

1. Adler MW. Diagnostic, treatment, and reporting criteria for non-specific genital infection in sexually transmitted disease clinics in England and Wales. 1: Diagnosis. *British Journal of Venereal Diseases* 1978; 54:422-7.
2. World Health Organisation. Non-gonococcal urethritis and other selective sexually transmitted disease of public health importance. Non-gonococcal urethritis — definition and diagnosis 11-1. *WHO Tech Rep Ser* 1981:59.

TO THE EDITOR, *Genitourinary Medicine*

**Indigenous intravaginal pentatrichomonads vitiate the usefulness of squirrel monkeys (*Saimiri sciureus*) as models for trichomoniasis in men**

Sir,  
After Street, Taylor-Robinson, and Hetherington proposed the squirrel monkey

as a model for the study of human trichomoniasis,<sup>1</sup> we obtained two young adult female squirrel monkeys from a commercial supplier. Unfortunately they were already infected with intravaginal trichomonads. Protozoa were regularly obtained by syringing the vaginas with a small amount of serum saline, and identified by dark field illumination. Isolates were readily grown in our modification of Diamond's medium.<sup>2</sup>

Study of the trichomonads in cooled wet preparations and in fixed silver stained smears showed five anterior flagella distributed in the "4 + 1" arrangement characteristic of the genus *Pentatrichomonas*, as described by Honigberg.<sup>3</sup> Other workers including Wenrich have found similar trichomonads in the vaginas and intestines of Rhesus monkeys.<sup>4</sup>

Because *Trichomonas* and *Pentatrichomonas* species are not easily distinguished, monkeys for trichomoniasis research need to be exhaustively examined for the presence of indigenous organisms. Naturally occurring infections can be eradicated by metronidazole, but as the immunological state could be altered by a new infection with trichomonas, we suggest that the squirrel monkey is not the ideal model for human trichomoniasis.

Yours faithfully,

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#### References

1. Street DA, Taylor-Robinson D, Hetherington M. Infection of female squirrel monkeys (*Saimiri sciureus*) with *Trichomonas vaginalis* as a model of trichomoniasis in women. *British Journal of Venereal Diseases* 1983; 59:249-54.
2. Hollander DH. Colonial morphology of *Trichomonas vaginalis* in agar. *J Parasitol* 1976; 62:826-8.
3. Honigberg BM. Evolutionary and systematic relationships in the flagellate order Trichomonadida Kirby. *J Protozool* 1963; 10:20-63.
4. Wenrich DH. Morphology of the intestinal trichomonad flagellates in man and of similar forms in monkeys, cats, dogs, and rats. *J Morphol* 1944; 74:189-211.

\*\*Drs Taylor-Robinson, Street, and Hetherington reply below.—  
ED, *Genitourin Med*.

TO THE EDITOR, *Genitourinary Medicine*

Sir,

The comments by Hollander and Gonder serve as a useful reminder that monkeys may be infested naturally in the vagina with trichomonads. However, the marmosets, tamarins, and squirrel monkeys that we used were not. As we pointed out previously,<sup>1</sup> three attempts to recover trichomonads from each of six squirrel monkeys before they were inoculated with *Trichomonas vaginalis* failed. Furthermore, trichomonads were not recovered from two of these monkeys after inoculation, despite 23 and 32 attempts respectively, or at any time from two squirrel monkeys that served as controls. The squirrel monkey may not be the ideal model for human trichomoniasis but it was the only one with which we had success. Obviously, an indigenous vaginal trichomonal infestation will vitiate the usefulness of any monkey in experiments of this kind. To be charitable, we shall assume that Hollander and Gonder were not implying on the basis of observations on two monkeys that such infestation was always likely to occur, for they were aware, of course, that it was not our experience. Finally, our observations indicated that immunity, at least to *T vaginalis*, developed only weakly so that, without testing the point, it may be premature to suggest that a squirrel monkey treated with metronidazole will not serve as an ideal model or, at least, a useful one.

Yours faithfully,

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#### References

1. Street DA, Taylor-Robinson D, Hetherington CM. Infection of female squirrel monkeys (*Saimiri sciureus*) with *Trichomonas vaginalis* as a model of trichomoniasis in women. *British Journal of Venereal Diseases* 1983; 59:249-54.

TO THE EDITOR, *Genitourinary Medicine*

**Tyson or not Tyson**

Sir,  
We report a case of gonococcal "tysonitis" in a man aged 35 who presented in March