

Correspondence

Action of rifampicin on Treponema pallidum

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SIR—Collart and Franceschini (1971) observed that:

- (1) Rifampicin administered to a rabbit at the same time as the rabbit is inoculated with *Treponema pallidum* does not prevent the development of orchitis.
- (2) Rifampicin administered to an animal with orchitis does not change the normal course of the infection. They therefore concluded that rifampicin had no effect on *Treponema pallidum*.

The absence of a treponemicidal effect of rifampicin in man has also been described. Nazarro, Caprilli, Iacovacci, and Valenzano (1968), Fuga and Gentili (1968), Trimigliozzi, Lospalluti, and Angelini (1969), Bonu, Bechini, and Santalo (1969), Ayala (1969), and Arya, Rao, and Nnochiri (1971) described patients with primary and secondary syphilis in whom rifampicin, given in a single dose or over a few days, had no effect on the course of the syphilitic lesions. Fuga and Gentili (1968) and Arya and others (1971) described patients who developed a primary syphilitic infection after treatment for urethritis with a single dose of 600-900 mg. rifampicin. As far as we know, no cases have been described of patients receiving daily doses of rifampicin from the first day of a syphilis infection right up into the secondary stage of the disease.

Case history

A 36-year-old Surinam woman was being treated with 600 mg. rifampicin daily since 27 June, 1973, in the Dermatology outpatient department of the Academic Hospital, Rotterdam, in connection with a borderline lepromatous leprosy. At the start of therapy the syphilis serology was as follows: WR, RPR, and FTA-ABS negative, VDRL positive with neat serum. The weakly positive VDRL can be regarded as a biological false positive reaction in leprosy.

The patient underwent regular checks. On June 5, 1974, a roseola rash was observed over the whole body, including the palms of the hands and the soles of the feet; the cervical and inguinal lymph nodes were palpable on both sides. These signs had been absent at the previous check in mid-April, 1974. She stated that she had first observed the non-itching rash some weeks before.

The serological findings on June 27 were: WR positive, titre 1 : 256, RPCF positive, titre 1 : 128, RPR, VDRL,

TPI and FTA-ABS positive. The patient was treated with 600,000 u. penicillin aluminium monostearate (PAM) three times a week for 6 weeks (total dose of 10.8 m.u.).

The first penicillin injection produced a classical Herxheimer reaction. The roseola rash cleared up a few days after starting the therapy. At the end of the treatment the syphilis serology was as follows: WR positive, titre 1 in 32, RPCF positive, titre 1 in 64, VDRL, TPI, and FTA-ABS positive.

It may be concluded on the basis of the above findings that:

- (1) When rifampicin is administered to a patient at the time of infection with *Treponema pallidum*, the drug does not prevent the development of syphilis.
- (2) When a patient receives rifampicin daily during the development of a syphilitic infection, the rifampicin does not influence the normal course of the syphilitic infection.

It may thus be concluded that rifampicin has no effect on *Treponema pallidum* in man, even when given daily over a long period.

Yours faithfully

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References

- ARYA, O. P., RAO, S. K., and NNOCHIRI, E. (1971) *Brit. J. vener. Dis.*, **47**, 184.
AYALA, L. (1969), *G. ital. Derm.*, **44**, 665.
BONU, G., BECHINI, E., and SANTALO, G. P. (1969) *Minerva med.*, **60**, 4840.
COLLART, P., and FRANCESCINI, P. (1971) WHO/VDT/RES/71.239.
FUGA, G. C., and GENTILI, G. (1968) "Symposium on Rimactane, Basel, November, 1968", p.77.
NAZARRO, P., CAPRILLI, F., IACOVACCI, C., and VALENZANO, L. (1968) *Boll. Ist. derm. S. Galliciano*, **5**, 115.
TRIMIGLIOZZI, G., LOSPALUTTI, M., and ANGELINI, G. (1969) *Puglia chir.*, **12**, 79.