Abstracts

These selected abstracts and titles from the world literature are arranged in the following sections:

**Syphilis and Other Treponematoses** (Clinical and Therapy)


The authors note that over the last two decades the average number of patients presenting annually at St. John's Hospital for Diseases of the Skin, London, with secondary syphilis has doubled. They have observed that, of the cases confirmed by biopsy, the diagnosis was clinically unsuspected in 10 per cent. and was not considered to be the most likely one in a further 15 per cent.

Biopsies of sixty cases of secondary syphilis are reviewed to define more clearly the distinguishing histological features. No single change was found to be constantly present, and prominent endarteritis and marked plasma cell infiltration were less frequently present than most accounts of secondary syphilis would indicate. In their opinion the following points are relevant:

1. Epidermal invasion by inflammatory cells usually occurs at an early stage in the disease.
2. The epidermis usually shows hyperplasia and psoriasiform change in the later stages of the condition.
3. The "wedge"-shaped pattern of the dermal inflammatory reaction suggests involvement of medium-sized vessels.
4. A granulomatous inflammation is seen with preponderance of lymphocytes and histiocytes in varying proportions.

Finally, it is essential to remember that the histological pattern of the secondary eruption is determined by the duration of cutaneous involvement, as well as by the morphology of the biopsied lesions.

J. R. W. Harris


Syphilis (Serology and BFP phenomenon)


It is a well-recognized fact that the sera of patients suffering from a variety of conditions other than syphilis contain reagin or reagin-like substances which result in biological false positive (BFP) reactions to standard serological tests for syphilis.

At the University of California Health Centre, a study was made of 1,083 patients (695 women and 388 men) whose sera gave reactive or weakly reactive Venereal Disease Research Laboratory (VDRL) tests. The Treponemal immobilization (TPI) test was non-reactive in all. The clinical diagnoses were made before the serological tests were performed. No clinical, histological, or epidemiological evidence of syphilis was found in any patient, nor had any received anti-syphilitic therapy.
BFP reactions occurred most frequently in cases of pregnancy and narcotic addiction—294 (27.1 per cent.) and 229 (21.1 per cent.) respectively. Other conditions giving positive reactions were rheumatoid arthritis (8.3 per cent.), neoplasms (5 per cent.), lupus erythematosus (3.7 per cent.), infectious mononucleosis (3.2 per cent.), recent immunizations (2.1 per cent.), rheumatic fever (2.1 per cent.), and alcoholism (0.6 per cent.).

While not claiming that their results should be regarded as indicating the true BFP rate among persons with the conditions listed, the authors point out that, since BFP reactions may occur in these conditions, confirmatory treponemal antigen tests are necessary.

C. S. Ratnatunga


The object of the study was to analyse and assess the results of routine serological testing in antenatal patients attending Queen Charlotte’s Hospital, London, during the period 1959-1968 inclusive.

Each patient had two reagin tests carried out (CWR and VDRL) as well as the RPCFT. Positive sera were further tested by one of the following methods: TPI, FTA-200, FTA 1/5, or FTA-ABS, to differentiate true from biological false positive results.

In the 10-year period, 219 patients with 293 confinements were found to have had a treponemal infection. This represents an incidence of 6.8 positive per 1,000 tests performed in a sample of 42,904 confinements. This high incidence was attributed to the relatively large proportion of patients who had previously lived in an area where yaws was common.

Seventeen of the patients had early syphilis, ten had congenital infections, fourteen were classified as ‘late yaws’, and 127 fell into the category ‘unclassified latent treponemal disease’. 25 per cent. of the positive sera were thought to be biological false positives.

The author points out that almost all women with primary or secondary syphilis will give birth to an infected child. He also points out the dangers of treating all patients with positive sera indiscriminately, in that BFP reactors are often penicillin-sensitive. He concludes that antenatal routine serological screening remains a worthwhile procedure.

During his brief discussion on ‘Tests for Specific Antitreponemal Antibody,’ the author does not point out that the TPI test will not be positive in cases of recent infection, and therefore has a limited value in pregnancy.

J. D. H. Mahony


In the FTA-ABS test, syphilitic sera give a uniform fluorescence of the treponemes. An irregular ‘beaded’ fluorescence has been reported with some sera from patients with systemic lupus erythematosus (SLE).

In this study, sera from 243 patients with connective tissue diseases (rheumatoid arthritis, 145; SLE, 56; scleroderma, 27; dermatomyositis, 10; mixed disease, 5) were examined by VDRL and FTA-ABS tests at the Mayo Clinic laboratory and at the National Center for Disease Control. 36 sera gave beaded staining at one or both laboratories. It was seen with three sera at both centres, with one only at the C.D.C., and with 32 only at the Mayo Clinic. The clinical diagnosis of the patients whose sera showed beading at the latter centre was: rheumatoid arthritis, 22, SLE, 10, scleroderma, one, and mixed disease two. Beading was found to be a labile phenomenon. Repeated tests on the same specimen of serum showed that it persisted with 23 sera but that the pattern of fluorescence changed with twelve; one serum which initially showed beading subsequently gave a reactive FTA-ABS result which was assumed to be falsely positive. No significant differences could be found between the 36 patients whose sera gave beaded staining and the 207 with negative FTA-ABS tests with regard to a variety of serological tests used in the investigation of connective tissue disorders.

Beading was also noted with sera from six of 172 patients who were excluded from the study because the required diagnostic criteria of connective tissue disease had not been fulfilled. Beading is not thought to be specific for SLE or for connective tissue disease.

A. E. Wilkinson

[Reprinted from Abstracts on Hygiene, by permission of the Editor.]


Procainamide hydrochloride-induced lupus syndrome was associated with development of false-positive serologic tests for syphilis. The unique feature of our case was the finding of a positive fluorescent treponemal antibody-absorption (FTA-ABS) test which became nonreactive after cessation of drug therapy. A previous association of this phenomenon with systemic lupus erythematosus has been noted. Therefore, one must interpret serologic tests for syphilis within the framework of clinical findings in both systemic and drug-induced lupus erythematosus.

Author’s summary


Treponema pallidum
Immunization Test in Subjects Suspected of Syphilis

Set of Plates for the VDRL Test
Bittner, J. (1973) Przegl. derm., 60 559

Syphilis (Pathology and experimental)

Immunity in Experimental Syphilis. VI. Successful Vaccination of Rabbits with Treponema pallidum, Nichols strain, attenuated by γ irradiation

24 rabbits, each immunized intravenously over a 37-week period with a total of 3.71 \times 10^7 γ-irradiated, non-infectious Treponema pallidum, Nichols strain, were found to be completely resistant to intradermal challenge with either 1,000 or 100,000 homologous treponemes administered 10 days after the last immunizing injection. Persistence of complete immunity was demonstrable in each of eleven vaccinated rabbits challenged intradermally with 1,800 T. pallidum, Nichols strain, 1 year after the last immunizing injection. In contrast, only minimal resistance was observed in ten of the T. pallidum-immunized rabbits challenged intradermally with 1,000 Treponema pertenue, Haiti B strain, 14 days after completion of immunization.

Venerel Disease Research Laboratory, Treponema pallidum immobilization (TPI), and Fluorescent Treponemal Antibody-Absorbed antibodies, each of which is important in the diagnosis and control of syphilis, developed during immunization and persisted in some animals for at least 1 year.

Conclusive evidence that TPI antibody is not associated with the immune response was provided by the finding that eight of the eleven immune rabbits challenged 1 year after vaccination had no TPI antibody before challenge and failed to develop immobilizing antibody during the 3-month period of observation after challenge.

Author's summary

Outer Envelope of Virulent Treponema pallidum

Sykes and Millet (Infect. and Immun., 1973, 7, 100) have reported that Treponema pallidum differs morphologically from Treponema denticola and Treponema ratti in that it lacks an outer cell envelope present in the last two organisms.

The present authors infected rabbits with the virulent Nichols strain of T. pallidum and examined ultrathin sections of infected testicular tissue with the electron microscope after staining with uranyl acetate and lead citrate. Microphotographs of their preparations clearly show the presence of a three-layered outer membrane lying external to the axial filaments which separate it from the cell membrane.

A. E. Wilkinson

Electron Microscopy of T. pallidum in Skin Lesions in Untreated Primary and Secondary Syphilis

Morphological Features of Primary Syphilitic Lesions
Kordes, S. (1973) Przegl. derm., 60, 327


Conditions that affect the Colorimetric Analysis of Lipopolysaccharide from Escherichia coli and Treponema pallidum Zey, P., and Jackson, S. (1973) Appl. Microbiol., 28, 129

Gonorrhea (Clinical)

Benign Gonococcal Arthritis with Cutaneous Lesions

In this paper read at the Annual General Meeting of the Heberden Society in November, 1972, the authors report a series of fifteen patients seen at the departments of venereology, rheumatology, and dermatology at St. Thomas's Hospital, London. The clinical manifestations of gonococcal septicemia in these patients was associated with pyrexia in thirteen patients and limited to the locomotor and cutaneous systems in all fifteen. The authors emphasize that a diagnosis of benign gonococcaemia must be considered in any patient with a combination of fever, polyarthritis, and vesiculopustular or haemorrhagic skin lesions.

[J. R. W. Harris

Anorectal Gonorrhoea presenting as Ulcerative Proctitis

Gonorrhoea in a Military Prenatal Population

Gonorrhoea among Females in a Military Population

Gonococcal Infection of the Skin of the Penis

Gonococcal Arthritis in Pregnancy
Brown, D. (1973) St. med. J. (Bgham, Ala.), 66, 693
Gonorrhoea (Microbiology)

Gonococcal Vasculitis
(Vasculite gonococcique)
PAQUIN, F., DUBAC, R., CADOTTE, M.,
Canad., 102, 1714 16 refs.

The authors, from the Hôtel-Dieu de
Montreal, describe the histological
appearances of biopsy material from
the vesiculonecrotic lesions of gono
coccaemia. They observed a vasculitis
of the small arterioles and capillaries
of the dermis with hyaline thrombi,
epidermal vesicles, and a dense
epidermal infiltration with neutro
phils. They found that Giemsa was
the most satisfactory stain for these
tissue sections.

In three of the nine patients,
positive cultures for Neisseria gonorrhoeae were obtained from the
vesicles.

[This article supports the view
that the vesiculonecrotic lesions of gono
coccaemia are secondary to a local
toxic action following embolization.
It would have been interesting if the
authors had subjected their sections to
the Danielsson fluorescent method to
see whether there was correlation
between the siting of the organisms
they found on Giemsa staining and
those demonstrable by fluorescence.]

J. R. W. Harris

Gonococcidial Action of Copper
in vitro FISCINA, B., OSTER, G. K.,
OSTER, G., and SWANSON, J. (1973)

When copper wire or shot, or paper
discs containing solutions of copper
sulphate or copper chloride, were
applied to plates of gonococcal agar
base seeded with a strain of N.
gonorrhoeae, growth was inhibited in
the surrounding area. There was little
effect on E. coli. Similarly, the ad
tion of copper to a suspension of
gonococci in Earle’s basic salt solution
produced a rapid fall in the viable
count. It is therefore suggested that,
since it has been estimated that 1 µg.
copper is removed from copper-
containing intrauterine devices per
day, this may offer prophylactic
protection against gonococcal infec
tion.

Pamela Waterworth

Role of Pili in the Virulence of
Neisseria gonorrhoeae
FUNSALANG, A. P., and SAWYER, W. D.
(1973) Infect. and Immun., 8, 255

Pili were isolated from the F62 strain of
Neisseria gonorrhoeae and purified
by Brinton’s method (Trans. N.Y.
Acad. Sci., 1965, 27, 1003). Antiserum
raised against pili and colony type 1
gonococci gave a single line of
precipitation against pili in gel
diffusion tests.

Removal of pili from type 1
gonococci, either mechanically or by
treatment with trypsin, reduced the
resistance of the organisms to phago
cytosis. Incubation of depiliated
gonococci under conditions which
allowed the regeneration of pili was
accompanied by increased resistance
to phagocytosis; this could be blocked
by the incorporation of inhibitors of
protein synthesis in the medium but
not by an inhibitor of DNA replica
tion. Depiliated type 1 gonococci
were still somewhat more resistant
to phagocytosis than avirulent type 4
organisms. This suggests that virulent
type 1 gonococci may have other
anti-phagocytic determinants besides
their pili.

Piliated type 1 gonococci were
shown to agglutinate the red cells of a
number of species and to adhere to
human buccal epithelial cells and to
polymorphs. Attachment of erythro
ocytes to the surface of type 1 but not
type 4 gonococcal colonies was
demonstrated. Purified pili were
shown to produce haemagglutination
and to adhere to epithelial cells.
These two phenomena were inhibited
by antisera to pili or type 1 gonococci.

The effect of pili in promoting
adhesion of virulent types 1 and 2
gonococci to epithelial cells and
increasing their resistance to phago
cytosis are thought to be important
factors in the process by which the
organism effects its initial lodgement
in the host.

A. E. Wilkinson

Isolation and Characterization of
the β Antigen of Neisseria
gonorrhoeae APICELLA, M. A., and
ALLEN, J. C. (1973) Infect. and
Immun., 7, 315

The β antigen of Neisseria gonorrhoeae has
been isolated from the alkaline-
extracted gonococcal endotoxin by
ion exchange, molecular sieve, and
powder block electrophoretic chroma
tography. Haemagglutination inhibition
studies indicate that the preparation
is essentially free of common enterobac
terial and gonococcal α antigen.
Analysis of the isolated antigen by
immunodiffusion and acrylamide gel
electrophoresis reveals only one de
tectable component. Chemical studies
indicate that the antigen is an acidic
glycoprotein composed primarily of
four major amino acids: alanine,
glutamic acid, glycine, and proline.
The antigen has an S0.10° of 8-55,
and spectral analysis in the ultra
violet and visible range reveals a
single absorption peak at 217 nm.

Authors’ summary

A Method for the Inclusion of
Neisseria gonorrhoeae and
Haemophilus influenzae in a
Mailed Microbiology Proficiency
Test MOLENSA, J., L., and PETRAN, E. I.
(1973) Hlib Lab. Sci., 10, 2

Bacteriological Diagnosis of
Gonorrhoea in Obstetrical
gynaecological Institutions in
Tashkent TURSUNOV, N. T.,
SOINA, K. K., DESYATCHIKOVA, A. V.,
Derm. Vener., No. 7, p. 67

On the Diagnostic Value of
Detection of Cytochrome Oxidase
in Gonorrhoea GRIGORIEV, V. E.,
TURANOVA, E. N., BEINOVA, V. N.,
SAZONOVA, L. V., NYUNKOVA, O. I.,
MIKHKODZHAeva, I. R., LURIE, S. S.,
SKURATOvICH, A. A., GRACHEv, Yu. I.,
YATSUKHA, M. V., and BOROVIK, V. Z.
(1973) Vestn. Derm. Vener., No. 9,
p 39

Gonorrhoea (Therapy)

Single Doses of Methacycline and
Doxycycline for Gonorrhoea. A
Co-operative Study of the
Frequency and Cause of
Treatment Failure WIESNER, P. J.,
HOLMES, K. K., SPARLING, P. F.,
WILKINSON, J. R. W., and
Dis., first published as 10.1136/sti.
50.1.86 on 1 February 1974. Downloaded from
http://sti.bmj.com/ on July 10, 2023 by guest. Protected by copyright.

During the last 10 years it has been noticed that the efficacy of treatment of gonorrhoea with tetracyclines has diminished. A co-operative study at Durham, N. Carolina, and Seattle, Washington, was made to determine the current efficacy of the treatment of gonorrhoea with oral regimes of methacycline or doxycycline given either as a single dose or in repeated doses at the same visit.

After isolation, N. gonorrhoeae was confirmed by oxidase reaction at both centres, and also by sugar-fermentation tests at Seattle. At Durham, men who had eaten within 1 hour of their visit were given 300 mg. doxycycline mononcyolate under direct supervision. At Seattle, patients were allocated by random number tables to treatment with either 1,200 mg. methacycline hydrochloride or intramuscular procaine penicillin G 2-4 mega units for men and 4-8 mega units for women. It was noted that at Seattle there were high failure rates with single dose regimens of doxycycline and methacycline, and men were therefore given 300 mg. doxycycline followed by the same dose an hour later. They were also paid as an inducement to come for follow-up and given 'Cola and cookies' to prevent nausea! Patients were followed up at 3 to 7 and at 14 days.

MICs of doxycycline mononcyolate, methacycline hydrochloride, tetra-cycline hydrochloride, and penicillin G were determined by an agar-plate dilution method on gonococcal isolates obtained before and after treatment, MIC being defined as that concentration that completely inhibited growth of any discrete oxidase-positive colonies. The results were:

Single-dose Regimen of Methacycline
Of seventy men and women given 1,200 mg. methacycline, sixty (86 per cent.) were re-examined within 7 days, and 62 (89 per cent.) within 14 days; 33 (55 per cent.) of sixty patients were still infected, including two of three homosexual men with rectal gonorrhoea. In all, 37 (60 per cent.) of 62 patients examined within 14 days showed treatment failure or re-infection. This was significantly greater than the eleven (18 per cent.) of 62 patients treated with procaine penicillin G. Nausea, vomiting, and gastric upsets were seen in 32 of 62 patients.

Single-dose Regimen of Doxycycline
Fifteen (45 per cent.) of 33 patients re-examined within 3 to 14 days were still infected. However, 92 male patients had entered this part of the trial, and the authors do not mention the high default rate.

Double-dose Regimen of Doxycycline
Of 28 patients treated with doxycycline 300 mg. followed by the same dose one hour later, 25 (89 per cent.) were re-examined. Only two (8 per cent.) of 25 were treatment failures. However, seventeen (68 per cent.) of 25 patients noticed unpleasant alimentary side-effects.

MICs of methacycline and doxycycline for pre-treatment isolates of N. gonorrhoeae were found to correlate significantly with the therapeutic outcome with these antibiotics. It was shown, both at Durham and Seattle, that there was a significant positive correlation (Spearman rank correlation coefficient) between the MICs of penicillin G and the MICs of the tetracyclines used.

The authors concluded that single dose oral treatment with 1,200 mg. methacycline hydrochloride or 300 mg. doxycycline mononcyolate gave unacceptably low rates of cure for uncomplicated gonorrhoea. They mention the high prevalence of gastrointestinal upsets after treatment with these regimes. They point out that many patients with gonococcal infections resistant to tetracyclines become asymptomatic whilst still harbouring N. gonorrhoeae, and suggest that sub-curative doses of tetracyclines may be a major factor contributing to the increasing resistance of N. gonorrhoeae in the U.S.A.

Michael Waugh

Among men and women in Seattle treated for uncomplicated gonorrhoea with single doses of 2-4 and 4-8 m.u. aqueous procaine penicillin G, treatment failure was noted within one week in 15-4 per cent. of men and in 10-4 per cent. of women. Failure rates were reduced significantly to 1-8 per cent. of men and 3-7 per cent. of women when 1g. oral probenecid was given simultaneously with the penicillin injections. The risk of failure was dependent on the resistance to penicillin of Neisseria gonor-rhoeae isolated before treatment. Failure rates, which can be expected when penicillin is used without probenecid, have been calculated for each level of gonococcal resistance to penicillin and can only be used in other regions to predict the efficacy of these doses of penicillin.

Authors' summary

Clinical Trial of New Semi-synthetic Cephalosporin Cephradine upon Staphylococci and Gonococci

Theerapeutic Effectiveness of Methicillin in Treatment of Gonorrhoea in Men


Sensitivity of Gonococcal Strains to Penicillin G, Ampicillin, and Doxycycline in a Finnish Metropolitan Material in 1971

Results of Investigations of Gonococcal Sensitivity to Combinations of Certain Antibiotics
Non-specific genital infection

A Contribution to the Microbiology of Urethritis


This is a study of 115 men with acute urethritis who were seen in the Chaim Sheba Medical Centre, Israel. Urethral specimens were examined for
(1) N. gonorrhoeae and other bacteria by direct smear and culture in unselective medium,
(2) Chlamydia by Giemsa-stained smear, supplemented by yolk-sac inoculation in four cases,
(3) Mycoplasma in liquid and solid urea-containing medium,
(4) Viruses by inoculation of human amnion cells and velvet monkey kidney cells in 67 cases.

Scrapings from the urethra of 28 men without a history of urethritis and with no urethral discharge were examined in a similar way, as a control group.

Of the 115 men with urethritis, the discharge was found positive for N. gonorrhoeae in 37 (32 per cent.), for T.-mycoplasma in 73 (63 per cent.), for M. hominis in eighteen (16 per cent.); in all but two of the cases with Mycoplasma, the T-strain was isolated, in sixteen in association with M. hominis. Chlamydia was present in sixty patients (52 per cent.). In 9 per cent. of cases, all microbiological tests were negative. All the 67 patients examined for cytopathogenic viruses gave negative results. Of the 37 men with gonorrhoea, eleven (30 per cent.) had Chlamydia and 24 (65 per cent.) Mycoplasma. Of the 78 men with non-gonococcal urethritis, 49 (63 per cent.) had Chlamydia and fifty (64 per cent.) Mycoplasma.

In the control group of 28 men, none was positive for N. gonorrhoeae. In two cases, T-mycoplasmas were isolated, in one of them in association with M. hominis. In one case Chlamydia was demonstrated, but this patient’s urethral smear showed numerous polymorphonuclear leucocytes and the authors suggest that he had an undiagnosed urethritis. Nine of these 28 cases were examined for cytopathogenic viruses, all with negative results.

The report also includes the results of examination of vaginal and endocervical specimens from 61 teenage girls from an institution for promiscuous girls. Seven (11 per cent.) were found positive for N. gonorrhoeae, 46 (75 per cent.) for Mycoplasma (in three of these M. hominis only was present, while in the others T-mycoplasmas with or without M. hominis were found); 21 (34 per cent.) were positive for Chlamydia and fourteen (23 per cent.) for T. vaginalis. In 25 per cent. of girls with positive genital Mycoplasma cultures, the same organism was demonstrated in throat smears. In two of thirty girls, Chlamydia was demonstrated in conjunctival scrapings.

[This is the first report of the occurrence of genital Chlamydia in Israel. The isolation rate is higher than has been reported from England and the U.S.A. and would presumably have been higher still had there been a more sensitive technique of culture on irradiated McCoy cells been used. Chlamydial ocular infection is, of course, common in Israel.]

J. D. Oriol

Mycoplasma and Human Reproductive Failure. III.

Pregnancies in 'Infertile' Couples treated with Doxycycline for T-mycoplasmas.


54 couples with primary sterility of more than 5 years’ duration were investigated. In sixteen women sperm-agglutinating serum antibodies were found (group A), and in 38 couples antibodies could not be detected (group B). Cultures for classical and T-mycoplasmas from the cervical mucus and ejaculate were performed. If the cultures were positive, the patients were treated with doxycycline from the 7th to the 16th day of each cycle. During treatment serum and sperm specimens were obtained and tested for doxycycline concentration and the presence of mycoplasma. If T-mycoplasmas were not eradicated after three treatment periods, both partners received an increased dose (200 mg./day) for 10 days for another two periods. If pregnancy intervened, no further treatment was given.

In all but thirteen individuals T-mycoplasmas were isolated. They were eradicated in all men during the first course of treatment. In nine of eleven women studied in detail, T-mycoplasma disappeared after treatment. After eradication of T-mycoplasma, pregnancy occurred in 25 per cent. of group A and 29 per cent. of group B. The significance of these findings is not yet clear and studies are being carried out to analyse whether any specific T-mycoplasma serotypes are of importance in producing reproductive failure.

[As a broad-spectrum antibiotic was used, it is of course also possible that other organisms had been similarly affected.]

G. W. Csonka

Colonization with Genital Mycoplasmas in Women

MCCORMACK, W. M., ROSNER, B., and LEE, Y.-H. (1973) Amer. J. Epidem., 97, 240

This paper records the prevalence of M. hominis and T-mycoplasma in 757 women attending a gynaecological clinic, antenatal centre, and private practice. In 534 (70.5 per cent.) T-mycoplasmas were isolated from the vagina and in 345 (45.6 per cent.) M. hominis; in 302 (39.9 per cent.) both organisms were found. Multiple regression analysis was used to define the factors most closely associated with colonization with genital mycoplasmas. T-mycoplasma was significantly increased in women attending hospital, in those using oral contraceptives, and in the unmaried. M. hominis with or without T-mycoplasma was more prevalent in coloured patients and those with gonorrhoea. The following variables were not associated with colonization with genital mycoplasmas: age, pregnancy, parity, prior abortion, stillbirths, low birth weight of the infant, vaginal discharge, and previous pelvic inflammatory disease.

G. W. Csonka

This paper describes the relation of sexual experience to colonization with genital mycoplasmas in 191 male college students. Specimens were taken from the urethral meatus, coronal sulcus, and urine. The students were asked to complete questionnaires relating to their sexual activity. Eleven of the patients gave a history of VD and five had dysuria during the week before the study; none had a frank urethral discharge. Thirteen individuals were excluded as they were taking broad-spectrum antibiotics.

Men who had not had sexual intercourse were virtually free of colonization with T-mycoplasma. Those who had one sexual partner showed an incidence of 18-8 per cent. and this rose with the number of sexual partners to 56-3 per cent. for those who had had intercourse with more than fourteen partners. *M. hominis* was less prevalent, but followed the same pattern. The rates of colonization among the sexually active men are similar to those reported for patients with NGU. It is felt that, in future studies, when comparing patients with NGU and controls, the groups should be matched for sexual experience as this appears to be an important factor in the colonization with mycoplasmas.

G. W. Csonka


In this paper the author compares historical and bacteriological data from 21 consecutive patients suffering from chronic bacterial prostatitis with similar data from twenty patients suffering from a condition he calls "prostatosis". [He has done much to define the clinical condition of chronic bacterial prostatitis and has described precise urological and bacteriological methods of diagnosis in other papers.]

The ages of the patients with bacterial prostatitis ranged from 23 to 70 years, and many had had initial attacks of acute prostatitis with fever, low back and perineal pain, and dysuria. Some had no history of acute infection though they had had low back pain with perineal discomfort and dysuria. Many had tender prostatic glands on rectal examination. Microscopy of the expressed prostatic secretions characteristically showed more than ten leukocytes per high power field with numerous oval fat bodies. The main feature of this group, however, was a repeated demonstration by cultural techniques of pathological bacteria localized to the prostate gland.

A condition described as 'prostatosis' was exhibited by twenty patients whose ages ranged from 24 to 56 years. Symptoms were more variable, though all had some referable to the genitourinary tract such as low back pain, perineal discomfort, frequency, and dysuria. None had had fever or a history of previous urinary infection. Microscopic examination of the prostatic secretions revealed changes identical to those seen in chronic bacterial prostatitis. The chief distinguishing feature of the group was the complete absence of pathogenic Gram-negative bacteria in the prostatic cultures.

The author discusses the generally poor results of treatment of chronic bacterial prostatitis and attributes these to the poor diffusion of most anti-bacterial agents into the prostatic fluid. There is some evidence that trimethoprim-sulphonamide mixtures give more encouraging results, however.

The treatment of prostatosis is difficult as the cause is unknown, though a percentage of patients responds symptomatically to treatment with tetracyclines 'as in the case of N.S.U.' Relief tends to be short-lived and it is difficult to know whether it should be attributed more to psychological than to chemotherapeutic reasons. Many cases do improve with periodic prostatic massage, presumably due to the relief of congestion.

The author considers that the excess of pus cells in the prostatic secretions suggests inflammation and, as no infective organism was found, possibly a virus or other unknown agent may be responsible.

J. K. Oates


Trichomoniasis


Candidiasis


Genital herpes


Other sexually transmitted diseases


Scabies: an Investigation into the Reasons for Hospital Referral STANKLE (1973) Practitioner, 210, 803


Pediculosis Pubis of the Scalp ELGART, M. L., and HIGDON, R. S. (1973) Arch. Derm., 107, 916


A Rare Case of Multiple Indurated Chancres ZORIN, P. M. (1973) Vestn. Derm. Vener., No. 6, p. 80 (English summary)

Public health and social aspects

Venereal Disease and Treponematoses—the Epidemiological Situation and WHO's Control Programme IDSÖE, O., KIRALY, K., and CAUSE, G. (1973) Wild Hlth Organ. Chron., 27, 400 15 refs

This paper compares the epidemiological situation existing 15-20 years ago with present-day trends. Formerly, developed countries experienced a low incidence of venereal diseases, whilst in developing countries the non-venereal endemic treponematoses (yaws, endemic syphilis, and pinta) were a major health problem. Since then the situation has changed, the endemic treponematoses having fallen dramatically after WHO/UNICEF-assisted mass treatment campaigns; however, a generation is now maturing without the immunity against venereal syphilis that previous generations possessed, and incidentally in some areas this causes diagnostic problems where endemic treponematoses co-exist with venereally acquired syphilis.

The authors note that it is not only medical treatment which halts the transmission of the treponematoses. Improving standards in hygiene and socio-economic conditions play an important role, and the disappearance of the rubeye of former times is cited as an example.

The success of the WHO campaign against non-venereal syphilis in Yugoslavia is mentioned, but a recrudescence of yaws has been found in Upper Volta and Senegal. The endemic treponematoses are considered to remain a long-term public health problem in tropical developing countries. National statistics on venereal diseases are stated to be unreliable, and long-term trends are thought to be of more value than absolute incidence rates. The incidence of gonorrhoea and syphilis is considered in a monidal context and the conclusion is reached that the rising trend in new cases of early syphilis and gonorrhoea has not recently been quite so marked as it was before 1968.

Behavioural and psychological factors complicate the aetiology of venereal diseases. Groups seen to be at risk are young people, especially asymptomatic females, recently arrived migrant labourers, tourists, seafarers, homosexuals, and prostitutes. More international contact
tracing is required and WHO-sponsored Franco-Swedish and Franco-Swiss projects are cited. Venereal diseases are seen to exist more frequently in urban areas, and the examples of Oslo, Paris, and Colombo with 36 to 60 per cent. of total cases in their respective countries are quoted.

Reasons for the preponderance of gonorrhoea over early syphilis are stated and the authors emphasize the need for sex education and dissemination of general information on venereal diseases.

Constant surveillance of the epidemiology of the endemic treponematoses and venereal diseases in co-operation with increasingly sophisticated laboratory techniques are needed if control is to be reached. Cultivation of *T. pallidum* would greatly contribute to a better knowledge of the biology and immunology of the pathogenic treponemes.

*Michael Waugh*

**Medical Examinations in the Bukhara Region**


**Role of Soviet Medical Workers in the Control of Venereal Diseases in the Mongolian People's Republic**


**Syphilis Control in Dagestan in the Prerevolution Period**


**Analysis of Syphilis Morbidity in the Province of Katowice**


**Effect of Industrialization on the Incidence of Venereal Diseases in the District of Pulawy**


**Miscellaneous**

**Australia Antigen and Antibody among Patients attending a Clinic for Sexually-transmitted Diseases**


974 patients attending the Department of Sexually-transmitted Diseases at the Middlesex Hospital were examined for the presence of Australia antigen (HBAg) and antibody (HBAb). Of these patients seventeen were positive for the antigen and 47 for antibody. This means that at the clinic there was an overall incidence of 1.7 per cent. positivity for HBAg and 4.8 per cent. positivity for HBAb. This is to be compared with incidences of 0.2 and 0.4 per cent. for HBAg and HBAb in the blood donor population at the North London Blood Transfusion Centre. The HBAg positive group had a high preponderance of males of Middle East and Mediterranean origin who appeared to be chronic carriers. The HBAb group, on the other hand, were mainly of British origin, and this group frequently had a history of either syphilis or gonorrhoea. In addition, promiscuous females and homosexual males have a considerably increased likelihood of being positive for HBAb. The greatly increased incidence of HBAb positivity among promiscuous individuals leads to the suggestion that hepatitis B may be primarily a sexually-transmitted disease, other parenteral means of transmission, such as transfusion, being incidental to the maintenance of the virus in the community.

*J. A. Almeida*

**Amphicillin Therapy for Corynebacterium vaginale (Haemophilus vaginalis) Vaginitis**


The authors describe an investigation in which they examined over 100 girls aged between 13 and 17 years, the residents of a correctional school. *C. vaginale* was detected in about 15 per cent., using a special method of vaginal culture.

Most of those affected complained only of vaginal discharge, and this
was observed to have characteristic features. None had gonorrhoea, trichomoniasis, or a yeast infection. All were cured, and the organism eradicated, after a short course of oral ampicillin.

M. A. E. Symonds

Studies on Development of a Vaginal Preparation providing both Prophylaxis against Venereal Disease and Other Genital Infections, and Contraception. I. Venereal Disease Prophylaxis, Past Experience, Present Status, and Plans for Future Studies


The paper embarks on a wide discussion of various prophylactic measures employed in the past against venereal disease. For example, the instillation of 2 per cent. silver nitrate solution in the eyes of neonates introduced by Crédé in 1881, and Walker’s results at St Nazaire in World War I.

The point is made that the development of effective treatment has most probably retarded the progress which might otherwise have been made in the prophylactic approach towards the control of the venereal diseases. It is suggested that the advent of the contraceptive pill has very probably reduced the use not only of the condom with its well-recognized prophylactic properties, but also of vaginal contraceptives, some of which, in the authors’ opinion, appear to have had prophylactic qualities also.

The medical, social, and ethical problems of designing a trial to test the efficacy of prophylactic regimes are discussed by the authors. They conclude that a study of ‘the recidivists’ (i.e. those who ‘by reason of immutability of their sexual habits and failure to profit by experience return to the clinic with fresh venereal infection with monotonous regularity’), might yield useful information. A study of this nature precludes the possibility of a controlled trial, but it is pointed out that, even if the prophylaxis is ineffective, the patients will be no worse off; and it is suggested that ‘the immutability of their sexual habits’ will be such that they are unlikely to become more or less promiscuous as a result of carrying out prophylaxis, and that therefore they ‘will act as their own controls on the basis of their known pre-prophylactic infection rate’.

The authors propose to use intravaginal contraceptive chemical preparations to be introduced immediately before sexual intercourse. Males are also to be issued with these preparations and told to insist that their female partners use them ‘in the interests of their own protection’.

[Since the condom has been available for many years, it will be interesting to see if the ‘recidivists’ can be motivated to behave with unaccustomed responsibility by employing the intravaginal prophylactic. If the response is favourable, will this not call into question the ‘immutability of their sexual habits’, thereby undermining to some extent the validity of the premises underlying the trial?]

J. D. H. Mahony

The Contemporary Challenge of Carcinoma-in-situ of the Vulva


This is a study of 44 cases of carcinoma-in-situ of the vulva diagnosed in the Gynaecologic Pathology Department of the Johns Hopkins Hospital between 1966 and 1972. Eighteen (41 per cent.) of the patients were 40 years of age or under. A history of sexually transmitted disease was given by nine patients (20 per cent.): two had had treatment for syphilis, one for lymphogranuloma venereum, and one for granuloma inguinale; four patients had, or had had, condylomata acuminata, and one had molluscum contagiosum. In four instances there was associated cervical neoplasia.

The histological criteria for the diagnosis of carcinoma-in-situ are described, and as far as possible the cell type of the tumour has been related to the chromosomal pattern. The authors think that the incidence of in-situ vulval neoplasia is truly increasing; they ask whether the apparent increase in virus disease of the genital canal is related to neoplastic alterations in the vulval skin, and suggest that it probably is. In the senior author’s opinion a majority of the lesions found in younger women represent proliferative responses to an infectious agent, primarily the wart virus.

[The occasional association of in-situ carcinoma with genital warts is now well authenticated. This interesting paper emphasizes again the importance of further research in this field.]

J. D. Oriel

Penile Venereal Oedema


This communication discusses the case of a 23-year-old circumcised male who developed oedema of the penile shaft involving 30 per cent. of the mucosal surface of the remainder of the prepuce. This oedema developed within a few hours of prolonged sexual activity with a prostitute. The skin was not abraded, the area was not tender, and there was no evidence of any urethritis. The patient made a rapid and uneventful recovery following sexual abstinence for a few days.

The authors have noted a similar syndrome in at least 25 to thirty patients during the last 5 years. It appears to be more common in circumcised men. A sexually non-participating partner with little vulval or vaginal mucous secretion seemed to be a predisposing factor in every case. The diagnosis is based on history, lack of an incubation period, characteristic physical appearance, and absence of paraphimosis. Rapid recovery occurs with rest.

J. R. W. Harris

Venereal Disease


Behçet’s Syndrome with Haemoptysis and Pulmonary Lesions

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