## **BOOK REVIEW**

Recent Advances in Sexually Transmitted Diseases—II Edition Edited by J. R. W. Harris — Publishers: Churchill & Livingstone: Pages 281, Price: £ 18.00.

The references occupy 54 pages and the scientific material of 200 pages, is accommodated in twenty chapters with the hint given that the next edition (III) will take in 'left out topics'. Contributors: Microbiologists, Virologists, Immunologists and Research Workers, comingled with CLINICIANS of the independent discipline of Venereology and those of the mixed Dermato-Venereology tribe: all are of an international pick and fame.

The English treatise is a judicious blend of reviews of achievements in clinical and laboratory science, pertinent to the discipline of Venereology, and surfaces the highlights of the up-dated advances, and it constitutes, verily, a "well" only twenty chapter deep, to be drunk ad lib, absorbed and metabolised, with the single purpose of recognising the scourge of VD/STD in humans, that today comprises, the some of the traditional lot of five venereal diseases and the new additional nine, baptised and admitted as STD, on the single basis that all these entities spring out of the common exercise on the part of the individual participants and / or their forbears of the prerogative of sexualty viz., the common genito-genital congress or through the sophisticated oro-anal, oro-genital or genito-anal communion, in multiple combinations and permutations.

Verily, the acronym STD stands for the boundless sea of countless illnesses, for which Willcox, the Veteran Venereologist, has rendered an alternate classification with Mackay Scollay's endorsement, based on known etiologic agents, reluctantly discarding 49 p. c. of entities as not creditable to any organismal agency known till date!

What is apparently worse confounding amidst the problem of etiologic diagnostic confusion is that most of the responsible disease agents in the victims may at times concurrently coexist! and yet not exhibit manifestations, all at once, or do so only in irregular succession and all these STD are discoverable only if they are borne in mind and appropriately probed into through specific microbiologic procedures which commonly comprise: Studies of plain wet mounts or after addition of liquor potash: of materials stained per Iodine, Gram, Silver, Giemsa, Unna Papp enheim, Papanicolaou technique etc. also fluorescine tagged antibody stain, direct or indirect, of histochemical stain of immune peroxidase stain, of cultures to confirm colonization in solid, liquid, selective, or auxomedium as for N. gon. or isolation of Chlamydia trachomatis, Chlamydia psittaci in irradiated Mc Coy cells, Mycoplasma hominis, Mycoplasma T (Ureaplasma urealyticum), of viruses particularly, Herpes Simplex Type II, Cytomegalo virus, but not

Hepatitis B virus; of animal inoculation as in rabbit testis with suspected luctic material or of detection of reagin or antibody in the serum, or of the latter in local secretions; or of antigen detection, whether it be the surface, core or the "e" in Hepatitis B virus infection; and of the qualitative and/or quantitative determination of mostly gamma globulins, which are also immuno globulins, G, A, M, D, E; or of ELISA (Enzyme Linked Immuno Sorbent Assay) or of biochemical procedures like – electrophoresis, immuno electrophoresis, counter radio immuno electrophoresis etc. or of the identification of plasmid and H L A antigen B 24 to correlate STD with the genetic background as in Reiter's disease, spondylitis, etc. to enumerate a few.

For all that, the discerning diagnostician shall have to recanvas and furbish himself and take in the fundamentals afresh of Biology, Statistics, Genetics, and particularly medical mathematics and the special symbols employed therein as also the up-dated preclinical and para clinical disciplines especially Biochemistry and Microbiology with emphasis on Virology and Immunology; all which prerequisites are essential and constitute 'the ladles' with which to empty 'the well'!

Only if stoutly equipped with the above intelligence, the Reader will be able to drink unsatiated of 'the Well of Laboratory Sciences and Technology', and usefully translate the knowledge thus gained into action in the professional practice of VENEREOLOGY.

In the candid view of the Reviewer, Clinicians in the Speciality of Venereology have reached the acme in their acumen to arrive at the anatomical diagnosis of VD/STD, but beyond this they cannot proceed especially when and where the etiologic component of diagnosis has to be settled, as in this respect they are in the NADIR!

It is at this clinico-laboratory crisis that this Text Book, 'Recent Advances in STD' comes to the rescue and serves with guidelines, in exemplification whereof are the following submissions: The clinicians may diagnose 'Chancroidal Genitals' but cannot accurately pinpoint the etiologic agent especially when Rajan states 68 different types of bacteria have been incriminated in the formation of chancroidal ulceration even so, a genital discharge by the bedside may be delineated into either gonococcal or non gonococcal category by the simple discriminating Gram stain technique, but how can the nongonococcal genital condition be etiologically determined when there exist Chlamydiae with 14/15 serologic subsidiaries, Mycoplasmas with subsidiaries — like the Hominis or T strain viruses of which Cytomegalo virus, of Hepatitis B infection or Herpes Simplex Hominis Type II exist and there are others like Corynebacterium vaginale, Candida, T. vaginalis, E. histolytica, Salmonella, Shigella etc. and Gay Bowel Syndrome is preponderant in certain men and pseudo or asymptomatic infections silently haunt and harass the female?

Today we have to concede that a cell is not just the familiar epithelial, nerve or blood cell as taught to us in the past but that even the smallest living object like the mycoplasma is one such that functions without a cell wall and that with all this peculiar anatomy, like other microbes, it also possesses primitive enzyme system! Surely the microbiology vacuum that had insidiously been created in the olden professional equipment has to be made good with Harris Recent Advances in STD (II Edition).

We recall also how we had been alerted to attention in the past that in response to infections in general, reagins/antibodies are formed in tissue fluids', and we had to hunt for these humorals through various precipitation, agglutination, complement fixation and other relevant technologic procedures. Today we look for the antigen too; and this Text Book points out that the antigen itself may also have to be detected in the body, since at times, as in Hepatitis B virus infection the serologic technology discovers both the antigen and its counterparts, the antibodies, and Super Carriers have to be distinguished from Simple Carriers! The cell mediated immunity is another phenomenon that has come to the forefront and has to be assessed to help us in the management of certain STD.

Yet another novel feature underlined in the book is the interesting technique in serology of employing colour coded antigens to detect antibodies in the automaton for speedy and easier recognition of results with the GROUPAMATIC equipment.

Over and above all these, is attention called insidiously to the master role played by BIOCHEMISTRY by ways of utilization of Immuno Fluorescence techniques on one side and the electrophoretic resolution of globulins and their qualitation and quantitation with the specific antigens, on the other.

Other sparklets are repeated emphasis on electronographic studies and as already alluded to the introduction of histochemical procedures, immuno histo-chemical stains, immuno peroxidase stains, innovation of animal models with the subcutaneous chamber in the guinea pig, the successful cultures with irradiated or chemically treated Mc Coy cells, in preference to the utilisation of He La 229 cells, mouse L 929 cells and the discovery of the gene-plasmid at times of the giant mega dalton size in the production of resistance on the part of organisms, and the concept of genetic trait as cause of illnesses is confirmed by positive marking of individuals with HLA antigen B 27 and that owing to a molecular mimicry, SARA (Sexually acquired reactive arthritis) in REITER's disease occurs, and that the blood group B individuals are worse predisposed to acquisition of certain STD, and experimental observations are available to confirm the alleged oncogenicity on the part of HSV Type II in the production of carcinoma cervix in the female and cancer prostate in the sexually superannuated male!

Referring to another bunch of lightning sparks again in current therapeutic misadventures, it is pointed out that Benzathine Penicillin G schedule recommended by WHO is questionable in the management of neuro syphilis as penicillin has been declared absent in the CSF; that motile T.pallida had been seen in CSF after parenteral IH penicillin administration and that even after enteral terramycin therapy, the aliquots of spinal fluids of these patients produced T.pallidum positive orchitis in rabbits; that anti Scabies topical medication with gamma benzene hexachloride causes in infants and children CNS changes and this regimen should be eschewed; and that treatment for refractory Candidiasis is with the Transfer Factor!

One view is clear and that is the horizon is clearing toward gradual disavowment of the term 'Sexually Transmitted Disease' in preference to the time honoured nomenclature 'Venereal Diseases'. It is also perceived that the general term, 'Pelvic Inflammatory Disease', is not in good taste and that in its stead shall preference be given to appellations like those that specify anatomic localization of illness such as salpingitis, oophritis, pelvic peritonitis etc. as had been in vogue in the past, and the term 'Moniliasis' is rebuked as 'NOMEN ABSURDUM'.

In short the Reader devoted to Venereology will immensely benefit from the laboratory science based treatise - Recent Advances in STD (II Edition) only when he has had the prior basic perimedical replenishment and is fortunate to have the willing co-operation, co-ordination and collaboration of bacteriologists, protozoologists, virologists, radiologists and above all biochemists and allied research workers and has access to their sophisticated physical armament, inclusive of Electron Microscope, and is sufficiently armed with knowledge to work them and not to worship them, and is surcharged with sophisticated stains such as the fluorescine tagged antibody stains and he commands facilities to carry out cultures in dead or live media and appreciated radio immuno fluorescence techniques, different types of electrophoresis and isotope tracer techniques.

The Reader will do well also to prepare for his ready reference on 'Acronyms Dictionary' to comprehend the large number of them appearing in the Text.

Finally, whilst it is not unfair and unjustified to vociferate "well" on this Text Book as worthy reinforcement and companion escalating the International well for STD study, it is equally not well to remain silent over many misspelt words that mar this English presentation, generally expected also to put the un-English Reader aright in his attempts to quench his thirst to achieve perfection in English - the international language - par excellence.

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