

Book Reviews

Laboratory Diagnosis of Group A Streptococcal Infections

Dwight R. Johnson, Edward L. Kaplan, Jaroslav Sramek, Ruth Bicova, Jiri Havricek, Helena Havrickova, Jithea Motlova and Paula Kriz. World Health Organization, Geneva. ISBN 92 4 154495 3

In spite of progress in the development of effective antimicrobials, *Streptococcus pyogenes* (Lancefield group A *Streptococcus*) continues to be an important and common human pathogen, with suppurative and non-suppurative sequelae. Although sore throat is the most common clinical manifestation, throat, skin or genital infection may develop into life-threatening bacteremia, toxic-shock syndrome, endocarditis, etc. Rather than publish another dull and dry textbook on the subject, the collaborative group has made a conscious effort to integrate the clinically relevant information with the practical laboratory diagnostic approach. The book provides a detailed guide to the procedures commonly used to culture and investigate group A streptococcal infections. It begins with specimen collection, transport, culture and identification, and ends with procedures for immunological techniques. The information is detailed, well referenced and easy to read. Each section is written in a standard procedural format. This helps in incorporating the information into any laboratory's operations manual with minimal revision. The sections on culture and identification of group A streptococci review well-established procedures that have been in practice for many years. The serological and immunological techniques provide valuable information on classification of the organism. Especially useful are the protocols for the production of antisera for serological grouping and serotyping, since much of this type of antisera is not available commercially.

This manual is an expansion of a previously published WHO internal document (WHO/BAC/80/1). The information provided is the result of the experience of two well-established streptococcal research laboratories, the WHO collaborating Centers for Reference and Research on Streptococci at the University of Minnesota in Minneapolis, and the National Institute of Hygiene in Prague. Clinical laboratories, research laboratories and epidemiologists will find it a useful guide in the investigation of such streptococcal syndromes as rheumatic fever, rheumatic heart disease, acute post-streptococcal glomerulonephritis and severe invasive group A streptococcal infections.

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PCR in situ Hybridization: Protocols and Applications

3rd Edition. Edited by Gerard J. Nuovo. Philadelphia: Lippincott-Raven, 1996. \$109.25. ISBN 0 397 58749 X

Surgical pathology and molecular biology are two fascinating and rapidly expanding specialities that separately demand a thorough study and highly specialized personnel. The interaction between the surgical pathologist and the molecular biologist has been somewhat limited for this particular reason. Training in molecular biology for pathologists has been limited to a few theoretical courses and symposia, and for the molecular biologist the occasion to study in-depth microscopic analysis of tissue is totally underestimated. Furthermore, some of the most frequently used procedures of molecular biology, such as polymerase chain reaction, Southern blot hybridization and fluorescent in situ hybridization do not allow for a direct correlation of molecular analysis with the cell morphology and microscopic examination. This relatively new technology, PCR in situ hybridization, attempts to breach the gap between the molecular technology and microscopic analysis of surgical tissues, thereby allowing the surgical pathologist to study in detail the nuclear morphology of cells, and to detect a target DNA available to the amplifying solution by highly sensitive technique (i.e., PCR), without destroying cell morphology. This textbook provides the necessary theoretical background of molecular biology techniques such as polymerase chain reaction (PCR), reverse transcriptase polymerase chain reaction (RT-PCR), in situ hybridization and the conjunction of PCR and in situ hybridization. It also provides basic knowledge of histology and histotechnology for unfamiliar molecular biologists. This textbook provides an in-depth discussion of standard protocols for in situ hybridization, solution phase PCR, PCR in situ hybridization (for DNA), and RT in situ PCR (for RNA). Of great importance are the two detailed chapters dealing with clinical applications of PCR in situ hybridization, focusing on three important viruses, namely human papilloma virus (HPV), hepatitis C virus (HCV) and human immunodeficiency virus type I (HIV). It concludes with a chapter on instrumentation required for in situ PCR, and a glossary of terms and reagents in molecular biological analysis. The author should be commended for the large number of high-quality figures and illustrations which make learning in situ hybridization more rewarding. The book is an excellent choice for medical technologists in the field of molecular pathology, scientists and molecular biologists, surgical pathologists and pathology residents.

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Picture Tests and Short Cases for the MRCP

1st Edition. Debra King. London: W. B. Saunders, 1996.
ISBN 0 7020 1815 5

250 Short Cases in Clinical Medicine

2nd Edition. R. R. Baliga. London: W. B. Saunders, 1997.
ISBN 0 7020 2205 5

Testing of clinical skills is an important step in the process of qualifying new physicians. Examinations, however, are generally considered a necessary evil. Prior to an exam, the candidate is usually overwhelmed with an increasing sense of urgency to squeeze in the largest amount of information in the shortest possible time. Crash courses and concentrated review books are convenient vehicles for such endeavors. On the part of the examiners, short cases are suitable for increasing the scope of clinical situations being tested. The above two books are part of Saunders' self-assessment series.

Picture Tests and Short Cases for the MRCP is designed for the defined purpose of helping candidates prepare for the MRCP Examinations (Part 2). It does so by helping candidates develop an overview of a large number of cases. Recognition of a short case depends largely on the nature of its signs. They have to be suitable for visual inspection. The book contains a collection of clinical cases and records of x-ray films or cardiograms that are likely to be subjects for examinations. The scope of cases covered is by necessity quite variable and ranges from common to rare, with the main characteristic being their visual nature.

If a picture is worth a thousand words, this should be contingent upon a clear and accurate representation. The color reproduction in some of the photos is suboptimal, and the pictures are sometimes cropped in a size that makes their key features less striking.

In general, the book is a useful adjunct to clinical training. Students in their final year and residents will find it helpful in sharpening their clinical skills and enhancing their experience.

250 Short Cases in Clinical Medicine is a useful study guide, not necessarily for reading just before examinations, but rather during clinical rotations. Skills outlined in the book cannot be acquired in a crash course, but have to be accumulated slowly with increasing experience.

As the title indicates, it is a collection of 250 cases, divided into nine major areas of specialty. It is supposed to represent the majority of situations likely to be encountered in clinical examinations. Each part begins with an introduction on the proper approach to examination of an organ system. Cases start with the diagnosis, followed by the likely brief instruction by the examiner. The candidate is given a list of what salient features he is expected to elicit, further tests or signs to look for, the diagnosis and the routine and advanced level questions likely to be asked in the examination setting. A list of references is given at the end of each case.

The student may find it a helpful quick reference to check what he may have missed immediately after examining a patient. A candidate preparing for Membership examinations can have a quick review of the cases and prepare himself mentally for the examination environment. The book is packed with clinical pearls that may be difficult to extract with the same clarity from standard textbooks.

The two books complement each other, and both are valuable study aids. They are recommended for graduating medical students, and for physicians preparing for specialty training in internal medicine and for examinations.

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Genetic Disorders Among Arab Population

Edited by Ahmed S. Teebi and T.I. Farag. New York, Oxford University Press, 1997. \$98.50. ISBN: 0-19-509305-4.

To my knowledge this is the first comprehensive book on genetic disorders in the Arab population, which is a very fertile and rewarding area for genetic research. As is quite rightly pointed out in the introduction, the Arab world is the cradle of civilization. Its position at the crossroads of the Old World's three continents made it the site of an extraordinary cross-fertilization of nations and cultures. As a result of the intermingling of races and different cultures over the millennia, permanent marks have been left on its land and soul. From the biological standpoint, this should make it a great melting pot of genetic material. This, however, is counteracted by some characteristics of Arab culture and behavior. Middle Eastern families are known to be mostly extended and endogamous. Consanguinity is, therefore, very prevalent, and when coupled with large family size, it makes the expression of autosomal recessive disorders quite visible. This is best illustrated in this book, where out of a list of 115 new single-gene syndromes first reported among Arabs, 100 of them are autosomal recessive.

This multi-author book is intended to highlight prevalent conditions, and to give comprehensive coverage of contributing factors. To that extent, the book contains five major sections discussing demographic factors, common entities, diseases in certain geographic regions, diseases in isolated communities and finally, Islamic laws of reproduction and people's attitude.

This book gives a clear and succinct discussion of Islamic laws pertaining to reproductive issues of family planning, abortion, artificial insemination, donated sperm, and in vitro fertilization.

The book gives a wealth of information that makes it very useful for health care professionals in Arab countries. The authors and editors should be commended for a comprehensive and clearly written volume. The price is not a bargain but the book is really worth it.

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