Lymphocytic gastritis and Helicobacter pylori: A Brazilian survey

We read with interest the report by Niemelä et al on the frequency of lymphocytic gastritis and its association with Helicobacter pylori in Finland. The results are interesting because they refute the widely held view that lymphocytic gastritis is rare in populations with high prevalence of H pylori. For instance, Dixon and colleagues studied 382 patients with dyspepsia (without gastric ulcer or neoplasm) and found 17 cases with lymphocytic gastritis (4.5%) and only seven of these patients were H pylori positive in histological sections. They did find serological evidence of H pylori infection in all patients, even in cases where the bacterium was not detectable in biopsy specimens, and concluded that this microorganism may be a possible antigen related to lymphocytic gastritis.

In Belo Horizonte, Brazil, the occurrence of gastric infection with H pylori has been well established. The infection is very common in the general population (80%) with a high rate of infection among children. The high frequency and early infection with H pylori are believed to be a predisposing factor to gastric atrophy, gastric cancer, and perhaps to other gastric diseases such as lymphocytic gastritis. Therefore, a possible association between H pylori and lymphocytic gastritis in populations with an early high rate of infection would be an interesting point to study. We carried out a study of the frequency of lymphocytic gastritis in Belo Horizonte. We reviewed 800 consecutive patients with gastric biopsies of oxyntic and antral mucosa, without malignant neoplasm or gastric ulcer. The biopsies were fixed in formalin and stained with haematoxylin and eosin. The number of lymphocytes in 100 epithelial cells was graded in all specimens: grade 1 (≤ 15/100); grade 2 (16–29); and grade 3 (≥ 30/100). Grade 3 was considered to indicate lymphocytic gastritis, as generally accepted (table 1).

Nearly all patients (97.7%) had 0 to 15 lymphocytes/100 epithelial cells and only six patients (0.8%) had lymphocytic gastritis. Four of these six cases were H pylori positive histologically. Our data show that the frequency of lymphocytic gastritis in Brazil agrees with international reports but differs from the results of Niemelä et al. Although different H pylori strains could be related to lymphocytic gastritis, as is apparently the case for gastric carcinoma and peptic ulcers, our results provide evidence that H pylori infection, based on epidemiological indexes, is not a predisposing factor to lymphocytic gastritis. Thus, the higher index (9–12.5%) found by Niemelä et al could be explained by other factors such as different kinds of antigens present in gastric lumen, geographic characteristics, and other specific factors related to a given restricted group of patients.

We appreciate the interest of Ribeiro et al. The main messages of our study were the association of H pylori infection with lymphocytic gastritis and the progression of lymphocytic gastritis to atrophic corpus gastritis. The number of patients included in our study was small, and although the material consisted of unselected patients, it is not fully representative of the population. Therefore, it may not be appropriate for the estimation of prevalence of lymphocytic gastritis, which has an unequal sex and age distribution. Lymphocytic gastritis is more prevalent in women, and the reported mean age of diagnosis in adults is 47–49 years. In our study, the patients were mostly middle aged or older (40–71 years) and there was a female predominance, both facts possibly contributing to the observed high prevalence of lymphocytic gastritis.

Differences in the diagnostic methods might add to the observed variance of prevalence of lymphocytic gastritis. There seem to be different views about the criteria to estimate the number of intraepithelial lymphocytes (IEL). We and others have used the ratio of IEL/100 epithelial cells (that is, 100 cells of epithelial origin). In another study, the authors used the ratio of IEL/100 cells in the epithelium (apparently meaning both lymphoid and epithelial cells). It is obvious that a lower density of IELs is needed to reach the diagnosis with the first method. In addition, like Niemelä et al, we selected the areas of maximal IEL concentration for counting. This probably increased the number of diagnoses compared with the evaluation made in random fields. Finally, the rather extensive sampling (eight systematic biopsies per patient) in our study potentially increased the number of diagnoses.

Ribeiro et al suggest that H pylori infection was, however, determined by haematoxylin and eosin stained sections with no
serological studies reported. Our study and other previous reports show that the sero-
positivity for \textit{H pylori} is common in lympho-
ctic gastritis, while histologically the bac-
teria may be present in very low numbers,
or not be detectable. Histology is thus not a
sensitive technique to diagnose \textit{H pylori} infection in these patients.

Association with coeliac disease indicates that lymphocytic gastritis is not a disease with a
single cause, but rather a reaction pattern associated with hereditary and environmental
factors. We agree with Ribeiro et al that it is important to consider possible ethnic and
environmental differences in the evolution of lymphocytic gastritis.

1. Dixon MF, Wyatt JJ, Burke DA, et al. Lympho-
ctic gastritis—relationship to \textit{Campylo-
bacter pylori} infection. J Pathol 1988;154:125-
32.

2. Jaskiewicz K, Price SK, Zak J, et al. Lym-
phocytic gastritis in nonulcer dyspepsia. Dig

temporal distribution of lymphocytic gastriti-
tis in gastrectomy specimens. Am J Gastroen-

4. Hoit J, Hamich L, Wallen L, et al. Lymphocytic gastritis: a newly described entity: a retrospec-
tive endoscopic and histological study. Gut


**Book reviews**

**Fungal Infection: Diagnosis and Management.** MD Richardson, DW Warnock. (£19.95.) Blackwell Science, 1997. ISBN 0 8654 2724 0.

As an undergraduate and would be micro-
biologist at St Mary's in Paddington (London, UK), moulds played a very impor-
tant and significant part in my training—
historical, as in Alexander Fleming and then
current with Dr Roland Davies.

So why is mycology more important today?
The advent of HIV related disease, the ever
increasing number of immunodeficient pa-
tients as a result of treatment (bone marrow,
renal, liver, heart, and lung transplantation,
and ever more heroic surgery: oesophagec-
tomy, etc), and the wider availability of inten-
sive care medicine have all contributed to
bringing mycology to the fore of severe and
life threatening microbiological problems for
our patients.

This book, written by two leading UK
mycologists, is divided into 27 chapters, to-
gether with a small but comprehensive select bibliography. The authors have at-
tempted to blend the European practice of
dealing with fungal infections, with those
found in Australia and the USA.

One of the early chapters is devoted to
laboratory diagnosis with help in how to
obtain the impression. This is followed by
38 pages on antifungal treatments, including
explanations on the ever increasing choice of
amphotericin formulation. Six chapters are
devoted to superficial mycoses and the remain-
ing 17 to deep invasive disease—those
experienced in Western hospitals managing
immunocompromised patients, and those
met within the tropics.

I found this book a joy to read; perhaps
with my background and that is to be expected.

However, I believe this book will be of special
interest to medical microbiologists, derma-
tologists, oncologists, intensive care special-
ists, and those caring for patients with HIV
related disease. It should be on the shelf of all
practitioners in these disciplines, somewhere
close to hand and not just left to gather dust.


The book continues the series \textit{Monographs in clinical cytology} and is written by cyto-
pathologists with great experience in the field of thyroid fine needle biopsy. The format is
reasonably conventional, initial chapters pro-
viding succinct descriptions of thyroid anatomy, needle biopsy technique, and rep-
porting guidelines including the assessment of specimens eligible for cell block. This review of dia-
nostic accuracy and limitations of thyroid fine
needle aspiration is particularly helpful.

Following this usual preamble are two
main chapters that describe the cytornorpo-
fication features of thyroid disease. The first
of these describes the cellular and non-cellular
components of the smear and includes the
only colour illustrations in the book. These
are somewhat disappointing being in multi-
plate format and often rather small. The
second provides a more conventional descrip-
tion of thyroid lesions including goitre, thyroiditis, and neoplasia. The text is concise and
clear and the black and white illustrations are
of high quality. Each section ends with a very
useful summary of diagnostic features and
caveats, although the number of the latter
might make one wary of ever attempting a
diagnosis in some instances.

The final chapter briefly reviews diagnostic
pitfalls. As acknowledged by the authors, the
style of the book inevitably leads to some rep-
etration in these chapters. The references are
helpfully grouped at the end of the book and
are impressively updated.

In summary, I believe this book has much
merit and will provide a useful addition to the
bookshelves of anyone dealing or reporting on
thyroid cytology specimens. The presence of
folded page corners in my own copy attests to
its value as a bench book.


In view of the current interest in the
changing epidemiology of group A strepto-
coccal (GAS) infections and indeed the pro-
found increase in the severity of streptococcal
diseases reported in many countries, it is
essential to have accurate microbiological and
epidemiological surveillance for GAS in each
country. The World Health Organisation has
established a worldwide network of collabo-
rating centres to assist in the diagnosis and
understanding of haemolytic streptococcal
infections. International Reference Centres
have greatly contributed to the understand-
ing and control of these infections including
the education and training of laboratory per-
sonnel; they serve as reference laboratories to
other research and service facilities globally
and contribute greatly to basic applied and
epidemiological research.

Hence, the preparation and publication of
this manual, which is the definitive reference
laboratory’s “bible” for all microbiological and
epidemiological techniques concerning the
laboratory diagnosis of streptococcal infec-
tions, notably Lancefield group A strepto-
cocci (\textit{Streptococcus pyogenes}).

The manual has been written by global
experts within this field from two WHO Col-
laborating Centres on Streptococci, namely
the centres in Minneapolis and Prague. It is
intended for wide use in many different
countries, therefore, methods that may not
be applicable—for example, in developing
countries, are also included with the aim
of promoting and developing laboratory
 technologies within the international network
of Streptococcal Reference Centres and
beyond. The protocols have been in use for
decades within these centres; there is a com-
prehensive reference list for both conven-
tional and new molecular typing methods
that will enable the microbiologist to use
these tests and establish a reference facili-
ity for streptococci (providing resources are
available) almost anywhere.

The manual describes key methods that
have disseminated from reference and re-
search centres in Atlanta, London, and New
York. The first Streptococcus Reference
Laboratory was established within the Public
Health Laboratory Service in 1946 by Dr
Winston Mantxed and Dr Fred Griffith with
guidance from Dr Rebecca Lancefield
(Rockefeller University, New York, USA).
From these people has evolved this unique
manual comprising decades of science and
innovation. It is essential to anybody embark-
ning on group A streptococcal reference or
research.


The first complete edition of the TNM
\textit{classification of malignant tumours}
(\textit{International Union Against Cancer (UICC)})
was published in 1968, although individual
site classifications had been available earlier.
This system of staging tumours by their ana-
tomical extent has found widespread if not
universal acceptance as a means of categoris-
ing disease, assisting management decisions,
predicting patient outcome, and enabling
comparisons between different treatment
protocols.

The fourth edition was published in 1987
and revised in 1992. This new fifth edition
remains pocket-sized and inexpensive. The
introduction includes a brief history of the
system and the variously named UICC
committee responsible for the classifications,
a listing of members of which reveals a
paucity of pathologists. Substantial differ-
ences from the last edition, and new classifi-
cations of previously unclassified tumours,
are helpfully marked by a vertical bar
adjacent to the relevant text and, while there
is no index, a table of contents is provided.
Changes have included merging the
classifications of nasopharyngeal, urological,
fallopian tube, and brain neoplasms, and
paediatric tumours have been deleted. Serum
marker concentrations can now be used in staging testicular and gestational
trophoblastic tumours. For gynaecological cancers, comparisons with the relevant FIGO stages are tabulated and the entire UICC classification—criteria, notation, and stage grouping—is identical to that of the American Joint Commission on Cancer in their 1997 Cancer staging manual. This is convenient but does raise the question of why two separate publications are considered necessary.

As with previous versions, specialist interest groups will, no doubt, analyse and possibly refute some of the changes, and each pathologist will continue to apply the classifications and staging systems demanded by individual colleagues. However, however, those who diagnose tumours and work with clinical oncologists, this is an essential reference.

C FISHER


This is an intriguing book. Its stated intention is to review the growing edge of pathology and it is certainly both enlightening and thought provoking. The sections addressing basic scientific issues, particularly those relating to molecular genetics, are not however for the faint hearted, and for many the introduction into phenomena such as genomic imprinting and microsatellite instability will challenge the imagination, as will the chapter emphasising the important role played by the stromal elements in neoplasia. There are also bold glimpses into the future, particularly with regard to information technology telepathology and the restructuring of research activity.

In contrast are excellent chapters that deal with vexing pathological problems such as trophoblastic disease, dermatoses, chronic hepatitis, and synovial fluid analysis—all of which are very much concerned with day to day diagnostic matters. There is also an interesting chapter on the spleen that should help to revive interest in this much maltreated organ. Hypertension is another troublesome area in which the traditional views are critically assessed and it is obvious that most of us will have to revise our thoughts about this topic. On the other hand a valuable plea is made for retaining the necropsy, a tradition that should certainly be retained despite the alleged accuracy of imaging techniques. In general this book illustrates the important point that although pathology quite correctly retains time honoured techniques, it should always welcome new ideas, particularly if it is to retain its crucial role in medical education. It is therefore highly recommended not just to pathologists who perhaps have become a bit too set in their ways but also to the generation that will be taking the specialty into the third millennium.

F D LEE


The Royal College of Pathologists of Australasia has a distinguished record in educating the users of pathology services in the correct selection and interpretation of laboratory tests. This book is the second (and much expanded) edition of a manual first published in 1980. There is no questioning its authority—more than 50 pathologists have contributed to it and an independent, more senior group, were involved in reviewing the text.

There are two main sections: one lists conditions and their causes, together with appropriate investigations for diagnosis, monitoring, etc; the second lists individual tests (drawn from all pathology disciplines) and describes their uses and limitations. There is a short introduction describing specimen collection, reference ranges, and predictive values (though not likelihood ratios) but sensitivities and specificities are not quoted for individual tests. An opportunity has perhaps been missed to discuss the concept of critical difference—the extent of change in the result of a test that may be of clinical significance rather than be due to natural variation—a concept with which even experienced clinicians are often not familiar. Appendices include reference intervals and a list of artefactual causes of erroneous results but these are also included in the main body of text.

The introduction does not make it clear whether the book is written primarily for hospital or primary care doctors. In the UK, ACB Venture Publications has recently published a book on Laboratory Medicine and Primary Care and the two books share many features, although the Australian product is more detailed. Indeed, it struck me as being unnecessarily detailed for doctors in primary care though no doubt, given the huge effort that has gone into producing it, the Australian College has done its market research and been encouraged by the response to the first edition. The book is easy to use and lies open flat without the need for weights or an elbow. It will be of value to clinicians who do not have easy access to direct consultation with a clinical pathologist but should not be used as a substitute for expert advice when this is readily available.

WILLIAM J MARSHALL


The previous edition of this tome was large . . . the latest is even larger and the authors have divided it into four volumes. Fortunately, there is no requirement on reviewers to read it from cover to cover in two weeks, and in reality it is not meant to be read like a novel. This is a comprehensive bench book of the old-fashioned variety, the sort pathologists turn to in desperation when the diagnosis eludes everyone in the department. It has well written chapters on the eye and its adnexae, as well as any condition that has or might conceivably have affected the eye. I found the chapters on conjunctival melanoma particularly helpful, and congenital abnormalities of the anterior chamber angle are covered well. The index is excellent—a necessity for any bench book.

This is a book for serious eye pathologists who expect to spend most of two hours gleaming information from any globe that rolls into their sight. It is a pity that the illustrations are mainly black and white, and even more that the colour illustrations are collected into plates at the end of each chapter. However, this does not really detract from the overall usefulness of the book. In brief, if you are serious about reporting eye pathology, this book must be on your shelf.

I A CREE

UK NEQAS meetings

Octagon Centre, University of Sheffield, South Yorkshire, UK

17 March 1998

One day meeting of the UK National External Quality Assessment Schemes for leucocyte immunophenotyping.

For further details please contact Dr D Barnett, Manager, UK NEQAS Leucocyte Immunophenotyping Schemes, PO Box 996, Sheffield S10 2YD, UK; tel +44 (0)114 271 1736; fax: +44 (0)114 271 1737.

18 March 1998

One day meeting of the UK National External Quality Assessment Schemes for blood coagulation.

For further details please contact Mr T A L Woods, Scheme Manager, UK NEQAS for Blood Coagulation, 305 Western Bank, Sheffield S10 2TJ, UK; tel +44 (0)114 270 0862; fax: +44 (0)114 275 8989; email: neqas@coageqa.demon.co.uk.

Application has been made to the Royal College of Pathologists for Continuing Medical Education approval and for accreditation in the Institute of Biomedical Sciences Continuing Professional Development scheme for both meetings.

Postgraduate course in gynaecological and obstetric pathology

Four Seasons Hotel, Boston, Massachusetts, USA

23-27 March 1998

A five day course primarily for pathologists and pathology residents as well as for gynaecologists with an interest in pathology will be presented by the Departments of Pathology, Massachusetts General Hospital and Brigham and Women's Hospital, Harvard Medical School. The course has category 1 accreditation for approximately 36 hours CME credit by the American Medical Association. Course fee is US$850 (residents and fellows $650).

For further details please contact Department of Continuing Education, Harvard Medical School, PO Box 825, Boston, MA 02117-0825, USA (tel: +1 617 432 1525; fax: +1 617 432 1562).