An early lesion of pulmonary carcinosarcoma: possible diagnostic problem in frozen section interpretation

Sarcomatoid carcinoma is a rare malignant neoplasm of the lung. Its definition was ambiguous until the recent establishment of World Health Organisation (WHO) criteria, according to which it is classified into carcinosarcoma, pleomorphic carcinoma, and spindle cell carcinoma. Most of the reported cases of carcinosarcoma or pleomorphic carcinoma of the lung have been large tumours. We present a case of an extremely small carcinosarcoma of the lung with an unfavourable course.

An asymptomatic 69 year old man was admitted to our hospital because of a coin lesion that was detected on a medical examination. He had smoked 20 cigarettes a day for 44 years. Computed tomography showed an irregular shadow of 19 mm maximum diameter in contact with the pleura, situated in the S3 region of the right lung. Neither transbronchial biopsy nor percutaneous needle biopsy yielded positive results. Because thoracoscopic biopsy with frozen section interpretation of a frozen section because this case represented ALCL with a sinus pattern of involvement. The sinuses of the lymph node are different from vascular channels in that they are not lined with endothelium. CD31 is believed to be a highly specific marker for endothelial cells. Recently, however, McKenney and associates showed that the expression of CD31 by macrophages could easily be detected on formalin fixed, paraffin wax embedded sections, causing misdiagnosis in surgical pathology practice. This characteristic of CD31 may also be important in distinguishing the compartments of the lymph node or spleen. The presence of CD31 cannot be used to distinguish sinuses from capillaries or venules because specific dendritic cells that line the sinuses of lymph nodes are also positive for CD31.

References


Figure 1

Frozen section of the tumour, which was composed of moderately atypical spindle cells with an inflammatory infiltrate, resembling reactive fibroblastic proliferation. The carcinomatous element was not conspicuous (haematoxylin and eosin stain; original magnification, ×100).
Cirrhosis with steatohepatitis following longterm stilboestrol treatment

Diethylstilboestrol, which is chemically related to the female hormone oestrone, was the main form of androgen suppression in the treatment of advanced prostate cancer up until the late 1980s. Although luteinising hormone releasing hormone (LHRH) analogues have superseded diethylstilboestrol in six postmortem cases with a history of diethylstilboestrol treatment for prostate cancer. In addition, two documented cases of hepatocellular carcinoma have been reported following longterm stilboestrol treatment. Interestingly, non-alcoholic steatohepatitis has been seen not only with oestrogenic drugs such as stilboestrol, but also with the partial agonist drug tamoxifen. It is known that steatohepatitis inducing drugs such as stilboestrol accumulate within mitochondria, resulting in ATP depletion and lipid peroxidation of hepatocytes.

Diethylstilboestrol was once the main alternative to orchietomy in the treatment of prostate cancer. However, its potential side effects, which include breast enlargement and cardiotoxicity, mean that it has been largely superseded by LHRH analogues with superior safety profiles. Although the use of stilboestrol has declined, its reintroduction to large scale clinical use has recently been proposed, particularly for early hormone refractory disease. This case report emphasises the need for regular monitoring of liver function tests in those receiving such treatment. It also serves as a further example of a steatohepatitis inducing drug.

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References
BOOK REVIEWS

Cytopathology of the Breast

McKee GT. (£130.00.) Oxford University Press, 2002. ISBN 0 19 514006 0.

Grace McKee’s recent publication provides an extremely comprehensive overview of breast entities. Although it is entitled “Cytopathology,” it encompasses much more, providing clinical and histopathological details, in addition to cytological features of a very wide range of breast entities.

The initial chapters provide detailed discussions of normal breast histology and cytology; methods of aspiration, smear preparation, and laboratory techniques, including sections on the reporting of cytological specimens and the limitations of cytology. Although concentrating on fine needle aspiration biopsy material, exfoliative cytology of nipple secretions and ductal lavage specimens are also included. Subsequent chapters are organised such that entities are introduced with clinicopathological descriptions followed by gross, histological, then cytological features. For many entities this is followed by a summary of cytological findings. There are numerous photomicrographs of both histological and cytological features, which are of excellent quality, the discussions are detailed, and references are extensive. The very comprehensive nature of the text is perhaps a slight weakness, for even the numerous photographs cannot fully illustrate the features of some of the lesions discussed, and although the limitations of cytological diagnoses are described, it is not always clear whether the diagnosis of some entities from the cytological specimen is practically feasible.

The book is splendidly written and beautifully illustrated. In the context of the recent changes in breast diagnosis and the increased complexity of breast lesions, an in-depth review of breast from the cytological and histological perspectives is timely. This book will be a useful reference text for those involved in diagnosing breast lesions by either cytology or histology, and may also be recommended to clinicians who take their own cytological breast specimens.

N A Miller

The Diagnosis of Lymphoproliferative Diseases: An atlas


The authors set out clearly in their preface how and why this atlas came into being. An atlas in pathology is usually a compendium of analecta of illustrations attended by short annotations. As a rule, atlases don’t make the “go for” book list when it comes to a diagnostic crunch. This book is more than an atlas. Condensed into a mere 262 (258 if one really wants to be pedantic) pages, crammed with excellent colour illustrations, this book is also full of facts, suggestions and guidelines. From the introduction (where one of the authors indulges himself with a military reference!) which contains very useful tables of antibodies used in haematopathology through to the index at the back, I found the book extremely user friendly and written in an almost conversational style. This book has everything a general surgical pathologist is ever likely to encounter, by way of lymphoproliferative diseases. I daresay the card carrying haematopathologist will be hard pressed to find an entity that is not covered. The book addresses all the diagnostic dilemmas that cause non-obniscuous sentiments in the diagnostician, and to which the very astute cytoarchitectural recognition will be a godsend.

R Chetty

CALENDAR OF EVENTS

Full details of events to be included should be sent to Maggie Butler, Technical Editor JCP, The Cedars, 36 Queen Street, Castle Hedingham, Essex CO9 3HA, UK; email: maggie.butler2@btopenworld.com

ACP Management Course for Pathologists, 2003

10–12 September 2003, Hardwick Hall Hotel, Sedgefield, County Durham, UK
Further details: Ms Valerie Wood, ACP Central Office, 189 Dyke Road, Hove, East Sussex, BN3 1TL, UK. (Tel: +44 01273 775700; Fax: +44 01273 773303; Email: valerie@pathologists.org.uk)

Dermatopathology Update

10–13 September 2003, Fairmont Copley Plaza Hotel, Boston, Massachusetts, USA
Further details: Tel: +1 617 384 8600; Email: hms-cme@hms.harvard.edu; website: www.cme.hms.harvard.edu

Predictive Oncology Meeting

15–16 September 2003, Solent Hotel, Fareham, Portsmouth, UK
Further details: Professor Ian A Cree, Translational Oncology Research Centre, Department of Histopathology, Michael Darmady Laboratory, Queen Alexandra Hospital, Cosham, Portsmouth PO6 3LY, UK. (Tel: +44 (0)23 92 286378; Fax: +44 (0) 23 92 286379; Email: ian.cree@portosp.nhs.uk)

Medicare India

6–8 April 2004, Pragati Maidan, New Delhi, India
Further details: Rob Grant, Kinex Log, 5 New Quebec Street, London W1H 7DD, UK. (Tel: +44 (0) 207 723 8020; Fax: +44 (0) 207 723 8060; Email: rob.grant@kinexlog.com; Website: www.medicare-expo.com or www.kinexlog.com)

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