Structured Pathology Reporting
of Cancer Newsletter

June 2014. Issue 18.

PDF versions of this newsletter are available from the structured pathology website.

Welcome to the 18th edition of the Structured Pathology Reporting of Cancer newsletter.

This newsletter is intended to provide information on the project to expand and promote the use of structured pathology reporting of cancer.

A new era in tumour staging?

TNM staging is currently facing some major conceptual challenges, with a move to distinguish between traditional anatomical TNM stage and tumour "profiling."

TNM stage has traditionally been purely anatomic, including size, depth of invasion, metastasis, location and number of lesions. However, in recent years, several prognostic factors such as PSA level and Gleason Score in Prostate cancer and serum tumour markers in testicular cancer have crept into TNM staging. With the rapidly developing biomarker era, prognostic tables need to make a dynamic shift to accommodate non-anatomic factors beyond tumour "stage".

Several components are being considered:
- Traditional anatomic "TNM" stage
- Tumour "Profile", incorporating the tumour histological type and grade as well as prognostic/predictive biomarkers which satisfy evidentiary requirements - including molecular markers, receptor status, gene expression profile and many others.
- Environmental or treatment related factors (including resection margins or "R" status
- Patient related factors
- A Prognostic Index which integrates the preceding matrix of components into a value for each individual patient

In preparation for the 8th Edition of the AJCC Staging Manual considerable work is being done to begin this transition. This is a mammoth task but one that will have a major effect on standards for pathology reporting worldwide, ultimately supporting a new era in personalised care for cancer patients.

One point of semantic contention is that since "stage" is an anatomical concept, the term "8th Edition Staging Manual" becomes a misnomer as the vision is to provide a prognostic/predictive guide for the clinical management of all cancer patients.

Another factor which needs to be considered is the division that this approach could create between those countries which are in a position to use biomarkers and those which are not, particularly developing countries. Although the UICC in particular has a mandate to provide a "staging" system for worldwide use, there is recognition that new diagnostic approaches and treatment opportunities should not be limited by this.

Developing countries in general are appreciative of the opportunity to assess their capabilities with the "best" standards and respond appropriately for their given context. In telecommunications for example, we are all aware of the rapid success of mobile phone implementation in the developing countries, effectively leap-frogging much of the need for land lines in those communities.

There was much discussion on these topics at the recent UICC TNM Core Group Advisory Meeting in Geneva in May. The final taxonomy for the 8th Edition is not yet resolved but this will be an active area of debate between UICC and AJCC in the coming months.

A/Prof David Ellis

New WHO for Gynae

The new World Health Organisation (WHO) Classification of Tumours of Female Reproductive Organs, Fourth Edition is now available at:

http://apps.who.int/bookorders/anglais/detart1.jsp?codlan=1&codcol=70&codcch=4006

This new edition will be incorporated into the dataset for Ovarian/Fallopian Tube and Primary Peritoneal site that is currently being developed by the International Collaboration on Cancer Reporting (ICCR) and will prompt an update to the ICCR's endometrial cancer dataset which is already published. Once this dataset is published our local protocol on Endometrial Cancer will also be updated to include the ICCR elements.

New Prostate Core Biopsy Protocol

The RCPA Board has recently endorsed a new Structured Pathology Reporting Protocol for Prostate Core/Needle Biopsy and it is now posted for download to:

http://www.rcpa.edu.au//Library/Practising-Pathology/Structured-Pathology-Reporting-of-Cancer/Cancer-Protocols

Of particular note in the protocol and one which raised the most comment during the public consultation period, was the inclusion of a recommendation to include only 1 core per specimen container.

The main opposition to the 1 core per container proposition has been the associated cost increase (specimen containers, transport, processing time). However, the protocol authors calculate this as a relatively small increase which is far outweighed by the benefits received.

To quote the protocol…"… the urologist should submit each needle core in a separate container, so that each specimen jar will contain only one core. This is in accordance with the current consensus recommendations from the College of American Pathologists, International Society of Urological Pathology and Association of Directors of Anatomic and Surgical Pathology.[1]

When there are 2 or more cores per container, fragmentation, if present, precludes accurate assessment of i) the number of cores received; ii) the number of positive cores if carcinoma is present in more than one fragment and ; iii) the extent of tumour in each core. These are important prognostic parameters, particularly with respect to the optimal selection of patients for active surveillance protocols.[1,2]

There is a greater tendency to core fragmentation when >1 core is submitted in a container.[3] Furthermore, if >2 cores are submitted in one tissue cassette/block it is difficult to align them all within one plane during embedding. Since foci of prostate carcinoma in needle core biopsies are often small, this may lead to the carcinoma not being represented on the slide and a false negative diagnosis being rendered. Deeper sections may not necessarily avoid this problem if the area of interest has been lost during block trimming in an attempt to cut a full face section."

References:
1 Amin MB, Lin DW, Gore JL et al (2014). The critical role of the pathologist in determining eligibility for active surveillance as a management option in patients with prostate cancer. Arch Path Lab Med in press.
2 Brimo F, Vollmer RT, Corcos J et al (2008). Prognostic value of various morphometric measurements of tumour extent in prostate needle core tissue. Histopathology 53:177-183.
3 Fajardo DA, Epsein JI (2010). Fragmentation of prostate needle biopsy cores containing adenocarcinoma: the role of specimen submission. BJU Int 105:172-175.

ICCR progress

Incorporation as a not-for-profit organisation is progressing but work on developing cancer datasets is speeding ahead. Increasing interest in the work of the ICCR and recognition of the value of an internationally agreed standard, has prompted a number of requests for new ICCR datasets. A cervical cancer dataset is being planned in collaboration with the International Society of Gynecological Pathology (ISGyP). This dataset is planned for later this year after the Ovarian/Fallopian Tube/Primary Peritoneal Site dataset progresses to public consultation.

IARC/WHO will be updating the genitourinary (GU) tumour classification during 2014-2015. This has prompted planning for 9 ICCR cancer datasets in synchrony, to cover all of the tumours of the genitourinary tract. This proposed GU project will include the review and update of the draft renal cancer dataset which is already underway.

Datasets for the following cancers have all commenced and are progressing well:
- Intrahepatic hepatocellular-cholangiocarcinoma and hepatocellular carcinoma (chair: Alastair Burt, Adelaide)
- Heart (chair: Dylan Millar, USA)
- Thymus (chair: Andrew Nicolson, UK)
- Mesothelioma (chair: Andrew Churg, Canada). This last dataset was originally planned for the reporting of mesothelioma of the pleura only, however it has been proposed that it should also include mesothelioma of the peritoneum due to the similarity in reporting.

The combined dataset for Ovarian, Fallopian tube and Primary peritoneum site (chair: Glenn McCluggage UK), incorporating the new FIGO and WHO classifications, has completed its first draft and is currently in final review.

For more details on the work of the INTERNATIONAL COLLABORATION ON CANCER REPORTING – read the ICCR newsletters at: www.rcpa.edu.au//Library/Practising-pathology/ICCR

If you have any questions regarding the international datasets or local protocols please contact Meagan Judge at MeaganJ@rcpa.edu.au

RCPA Macroscopic Cut-up Manual

www.rcpa.edu.au/Library/Practising-Pathology/Macroscopic-Cut-Up

The Anatomical Pathology Macroscopic Cut-Up Manual has been updated with the addition of breast and respiratory specimen protocols and in an exciting new development, videos are now included demonstrating breast, prostate and colorectal tumour cut-up.

The manual now contains sections providing guidance for the macroscopic assessment of breast, respiratory, gastrointestinal, genitourinary and skin specimens. Dictation templates aligned with the Structured Reporting of Cancer Protocols are provided on each specimen page. Further systems and video vignettes will be added in the future as the project progresses. The Lead Pathologist on the project is Dr Simon King and the Project Manager is Margaret Dimech. Margaret can be contacted by email at margaretd@rcpa.edu.au for further information.

Structured Pathology Reporting Project Manager:

Meagan Judge
The Royal College of Pathologists of Australasia
Phone: +61 2 8356 5854
Mobile: 0402 891031
Fax: +61 2 8356 5808
Address: 207 Albion Street, Surry Hills, NSW 2010, Australia

WEBSITE: www.rcpa.edu.au/Library/Practising-Pathology/Structured-Pathology-Reporting-of-Cancer

You have received this message because you are listed
as a stakeholder of the national structured pathology reporting project.
If you do not want to receive this newsletter in the future, please email: MeaganJ@RCPA.EDU.AU