Letters

KU activity

We were interested to read the paper “KU activity: a method for calculating histopathologists’ workload” by Suvarna and Kay, and note that they invite comments following the application of their scheme by other departments.

Our department is a dedicated cytopathology laboratory which in 1997 reported 59 628 cervical smears and 10 437 non-gynaecological specimens. The department is staffed by 2.5 WTE consultant pathologists (0.5 WTE currently vacant). It is located in a large teaching hospital and has close association with the department of histopathology, from which junior pathologists rotate through.

We therefore propose that in university departments KU activity could be applied for calculating histopathologists’ workloads. 2,3 We have accepted increased workloads, and have only complained when their capacity is exceeded by a major factor, such as the above.

Rather than engender a discussion on the difference between pathologists’ and cytologists’ workloads, it has hitherto been the rule that pathologists have been rated up to 5 KU per hour, whereas cytologists have only complained when their capacity is exceeded by a minor factor.

We therefore agree that one KU is appropriate for many specimens (for example body fluids, aspirates, ascitic fluid, urine, sputum). A significant proportion of our workload is fine needle aspirations (FNA) received from many sites, but especially breast, of which approximately 30% are from the breast screening programme. The latter can be extremely time consuming to report, involving numerous slides (up to 20 per case).

In our department 70–80% of all breast FNA undergo immediate reporting, with the final report being issued by a different consultant who also reviews the immediate result; this is an important quality control aspect but adds time to the reporting process. One-stop breast clinics tie a pathologist down for reporting purposes for the duration of the clinic. This is time consuming. We therefore propose that a more realistic score for FNA from the breast screening programme would be 3 KU per specimen, with FNA from other sites and symptomatic breast disease being scored at 2 KU. This scoring, as with the gynaecological specimens, also allows for additional time spent on cytological/histological correlation and attending CPCs. Application of this modified KU score to our workload is shown in table 1, giving a total annual of 33 443 KU, which equates to 1338 per consultant session at 2.5 WTE and 1672 per consultant session at 2.0 WTE. No wonder we sometimes feel that we are working hard!

Suvarna and Kay give no KU allowance for pathologists taking their own FNA samples, which in some departments is a large time commitment.

Suvarna and Kay suggest that in university departments KU activity could be applied to sessions of research, teaching, or management. Management is also a requirement in an NHS department. Taking 820 KU per consultant session per year, as suggested, we suggest that 5 KU per hour could be used as a rough guide to calculate time spent on these other commitments.

We look forward to comments from Drs Suvarna and Kay on the points we have raised, but consider that modification must be made to their scoring system for application to a large cytopathology department.

S J JOHNSON
V WADEHRA
Cytology Department, Royal Victoria Infirmary, Newcastle upon Tyne

Table 1 Application of KU activity scores to workload in cytopathology at Royal Victoria Infirmary

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>1997</th>
<th>KU weighting</th>
<th>KU score</th>
<th>Modified KU</th>
<th>Modified KU score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gynaecology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59 628</td>
<td>2</td>
<td>20 776</td>
<td>2</td>
<td>20 776</td>
</tr>
<tr>
<td>To pathologists:</td>
<td>10 388</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-gynaecological</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FNA breast:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total screening</td>
<td>1916</td>
<td>1</td>
<td>1916</td>
<td>3</td>
<td>1725</td>
</tr>
<tr>
<td>Symptomatic</td>
<td>1341</td>
<td>2</td>
<td>2682</td>
<td>3</td>
<td>1725</td>
</tr>
<tr>
<td>FNA acute</td>
<td>88</td>
<td>1</td>
<td>88</td>
<td>1</td>
<td>176</td>
</tr>
<tr>
<td>FNA other</td>
<td>731</td>
<td>1</td>
<td>731</td>
<td>1</td>
<td>1462</td>
</tr>
<tr>
<td>Fluids:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleural</td>
<td>460</td>
<td>1</td>
<td>460</td>
<td>1</td>
<td>460</td>
</tr>
<tr>
<td>Acute</td>
<td>163</td>
<td>1</td>
<td>163</td>
<td>1</td>
<td>163</td>
</tr>
<tr>
<td>Breast cyst</td>
<td>132</td>
<td>1</td>
<td>132</td>
<td>1</td>
<td>132</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>559</td>
<td>1</td>
<td>559</td>
<td>1</td>
<td>559</td>
</tr>
<tr>
<td>CSF</td>
<td>406</td>
<td>1</td>
<td>406</td>
<td>1</td>
<td>406</td>
</tr>
<tr>
<td>6% to pathologists:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sputum (total 1215)</td>
<td>73</td>
<td>1</td>
<td>73</td>
<td>1</td>
<td>73</td>
</tr>
<tr>
<td>Urine (total 2704)</td>
<td>162</td>
<td>1</td>
<td>162</td>
<td>1</td>
<td>162</td>
</tr>
<tr>
<td>Semen (total 1272)</td>
<td>76</td>
<td>1</td>
<td>76</td>
<td>1</td>
<td>76</td>
</tr>
<tr>
<td>Training:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-gynaecological</td>
<td>400</td>
<td>2</td>
<td>800</td>
<td>2</td>
<td>800</td>
</tr>
<tr>
<td>Gynaecological</td>
<td>1500</td>
<td>2</td>
<td>3000</td>
<td>2</td>
<td>3000</td>
</tr>
<tr>
<td>Totals</td>
<td>10 437</td>
<td>30 133</td>
<td>33 443</td>
<td></td>
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</tr>
</tbody>
</table>


Authors’ response

We are pleased that some are attempting to evaluate the KU method of assessing workloads we described. Drs Johnson and Wadehra have certainly used the scheme accurately, and we confirm that they have correctly derived their total figure of 33 133 KU. It is stressed that the sessions counted in KU calculations are total sessions, and those allocated to “clinical” work. If Drs Johnson and Wadehra had their part time post filled, then the total KU/session would be 1108 KU. That they are carrying the extra load means they are doing 1410 KU/session each!

Our calculations presented in the paper showed a real year, in which a consultant retirement/reappointment took place. We did not stop counting these sessions when no post holder existed, but one can produce a calculation to validate one's claim for excess workload in terms of sessional activity. This is a particularly important point to grasp since it has hitherto been the rule that pathologists have accepted increased workloads, and have only complained when their capacity is exceeded by a major factor, such as the above. Thus, using the KU methodology (if one accepts the analysis) it would seem that the Royal Victoria Infirmary should have three WTE posts.

To turn to the specific questions posed, the KU calculations automatically assume that audit, management, CPCs, and other housekeeping duties are built into the values derived from any caseload. However, one required to set up an entirely new session of duty, that would require compression of the pre-existing workload and this could then be calculated in terms of the time taken for the duty or the extra cases, as appropriate.

We wholly expect that many will disagree with our KU ratings. Rather than each department setting its own figures we need a quorum of departments to evaluate this methodology and then to revise (if necessary) our figures. We therefore welcome Drs Johnson and Wadehra’s views on cytology weightings, and state in our defence that the figures reflect the large number of Cytospin sample cases that we see.

We have made no calculation for tasks such as taking FNAs personally. Our experience is similar in that most of this time is spent getting the pathologist to the patient and back again, with little time doing the aspiration. Rather than engender a discussion on the...
Bouin’s fixed trephine biopsies

We read with interest the recent paper of Gala et al concerning the reactivity of a panel of antibodies on Bouin’s fixed bone marrow trephine biopsies, and the letter in response by Vassallo and Pinto.1 We have used Bouin’s fixative for trephine biopsies during the last 10 years because of the beautiful morphology which is achievable, and we find that monoclonal antibody L26 gives consistent and excellent positivity (following three to five hours in Bouin’s fixative to which formic acid 10% is added for further decalcification). The sections, in 10 mM citrate buffer, are subjected to two minutes of pressure cooking at full pressure before immunostaining using the Strept Avidin B Complex/HRP Duet (Dako) for visualisation of reactions. This is such an important antibody for subtyping of marrow infiltrates and visualisation of unsuspected B cell infiltrates (while reacting with normal B cells also) that we felt it would be appropriate to consider phosphate within the algorithm for hypocalcaemia. But the fact that these comments can be made indicates that the algorithms as presented are profoundly thought provoking, and thus meet an important educational and instructive need. From the breadth of information provided, this volume should be extremely useful in accident and emergency departments and the general medical ward, as well as in the chemical pathology laboratory; and of particular interest to trainees constructing their own algorithms, as so much additional and unexpected information is provided. This is a very original, scholarly, and informative book and deserves to do well.

DEVAKI NAIR
TONY WINDER

CD-ROM reviews


There are several CD-ROM based haematology offerings on the market. This is one of the cheapest. It is accompanied by minimal documentation but “help lines” for support are available. Installation is easily carried out. The CD-ROM comprises an atlas, a morphology quiz, and mini case vignettes for diagnosis and interpretation.

The value of an atlas as a reference or as a teaching aid is dependent on the quality and variety of images for each topic. Unfortunately, although there is some variety, the quality, resolution, and staining are not consistently high. This diminishes the usefulness of the overall package considerably. It seems that an attempt to use image manipulation has been made to compensate for out of focus source material. This is not really successful.

The nomenclature used, while conforming to international terminology using Greek word stems (Bull BS, Breton-Gorius), is not readily accessible to everyday practitioners of haematology, for example codocyte = target cell; rubriblast = pronormoblast. This is particularly important for trainees.

The format of the quiz and diagnostic modules makes them useful additions. Their potential as teaching aids is limited by the quality of the atlas. The limited number of diagnostic problems means that the “correct” answers can be “learnt” with a few sessions.

If the quality of the images was better the whole atlas would be of greater use. At present I do not think that, in spite of its price, it offers a real alternative to more expensive multimedia publications or the plethora of general and specialist haematological atlases in textbook format.

NEIL ANDERSON

Book review


This book introduces a new approach to organising fact and interpretation in chemical pathology. Being such a new concept, it takes some getting used to, but having appreciated the direction which the author has taken, the potential of this and likely future editions becomes very attractive. The book presents in 49 short chapters algorithms of laboratory data in various scenarios in chemical pathology, with detailed and informative notes, often starting in their introduction of previously unconsidered information.

This is a first edition, and already some changes may be appropriate, as for example with new diagnostic criteria for diabetes, and approaches to thrombosis, myocardial infarction, CKMB and troponins. There are also occasions on which some pathologists would settle for less complex investigations than those recommended, as with the proposal that a raised alkaline phosphatase should lead straight to ioenzyme studies without consideration of other biochemical changes such as γ-glutamyl transpeptidase; and in hyperuricaemia, where alcoholism, obesity, diabetes, impaired glucose tolerance, and impaired renal function might be considered before proceeding to analysis of 24 hour urate excretion. It might also be appropriate to consider phosphate within the algorithm for hypocalcaemia. But the fact that these comments can be made indicates that the algorithms as presented are profoundly thought provoking, and thus meet an important educational and instructive need. From the breadth of information provided, this volume should be extremely useful in accident and emergency departments and the general medical ward, as well as in the chemical pathology laboratory; and of particular interest to trainees constructing their own algorithms, as so much additional and unexpected information is provided. This is a very original, scholarly, and informative book and deserves to do well.

TONY WINDER


The cover notes of this CD-ROM state “Discover the interactive computer system that helps you make the right call every time! URINALYSIS-TUTOR gives you all the information you need for accurate urinalysis at the click of your mouse. No previous computer experience is required.”

This is essentially an atlas of urinalysis with short bullet point pieces of text accompanied by a comprehensive library of images. The CD is divided into five sections: “Urinalysis tutorial,” “Disease associations,” “Image index,” and “Final exam.” The section on microscopic features of “Urine sediment structures” is well illustrated and allows the opportunity for self assessment. Some useful diagrams cover basic anatomy, physiology, and principles of microscopy. The “Disease associations” section lists biochemical features and microscopic findings in common diseases. The “Image index” is straightforward and it is easy to locate the desired images.

Does it live up to the claims in the cover notes? The answer is yes. Starting from a background in cytopathology, I worked my way through the tutor and managed to answer the questions in the final exam correctly. The program is easy to install, the user interface is intuitive, and the CD ran perfectly on my old double speed CD player.

Should we all rush out and purchase it? This is a more difficult question. It is a useful training tool but I am not sure if it could compete with a comprehensive well illustrated text in the same price range.
Instructions for Authors

Papers for publication should be sent to the Editor, *Journal of Clinical Pathology*, BMA House, Tavistock Square, London WC1H 9JR (tel: 0171 383 6209/6154; fax: 0171 383 0684; email: jclinpathol@compuserve.com). Receipt of manuscripts will be acknowledged by the editorial office.

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References

- References must be numbered in the order they appear in the text and include all information (Vancouver style); references with more than three authors should give only the first three followed by et al.
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- Information from manuscripts not yet accepted, or personal communications may be cited only in the text and not included in the references list unless they are not checked by us; authors must verify references against the original documents before submitting the article.

Manuscript checklist:

- Is there an abstract?
- Are the abbreviations spelt out?
- Are the measurements in SI units?
- Are the references in Vancouver style?

Revised January 1999
Bouin's fixed trephine biopsies.

G M Markey, H D Alexander and H Foster

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