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B A C

**British Association
for Cytopathology**

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Editorial

Sharon Roberts-Gant

This issue highlights the changes facing Cytopathology. The President's Piece talks of the changing roles within Cytopathology, expansion of diagnostic cytology and the potential change to HPV primary screening; the Chairman's Column discusses the same screening issue as well as education and the updated Code of Practice. If you have visited the BAC website recently (bearing in mind I'm writing this on the 2nd September) you will have seen the link to the UK NSC public consultation on cervical screening with the proposal to change the primary screening test to testing for human papilloma virus with an extended screening interval. Nick Dudding has provided an article which raises concerns over the safety of an extended screening interval, the differences in testing platforms, vaccination, defaulters, performance against the current screening programme etc. The BAC invites comments from the membership prior to the BAC response to the consultation, please respond.



The nominations for the elections to the Executive are in and the candidate summaries can be read on page 4, both candidates bring a wealth of cytological and professional experience and knowledge. There is feedback from last year's European Congress of Cytology — remember we are hosting it in 2016! Dr Diane Hemming has provided us with a diagnostic case study and Beverley Crossley brings us back to basics in non-gynae cytology. Helen Burrell has talked to three biomedical scientists four years on from facing the dilemma of cervical cytology mergers.

Cytology has faced changes in recent years. First came liquid-based cytology, a major change requiring re-training of all personnel involved in sample collection and sample reading of cervical screening samples. Then HPV testing was introduced, and now we are faced with the potential change to the primary screening test. I know that staff are concerned about their long term prospects and whilst advances in science means that the roles may have changed Cytology will still be a biomedical science discipline.

Sharon

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Editor: Andrew Evered

INFORMATION FOR CONTRIBUTORS

Articles for inclusion in SCAN can be emailed to the editor if less than 1MB in size or supplied on CD/DVD or memory stick. Text should be in a standard text format such as a Word document or Rich Text Format (rtf file). Please supply images as separate files in tiff or high quality jpeg files at a resolution of not less than 300 dpi (600 dpi if the image includes text). 35mm slides and other hard copy can be supplied for scanning if no electronic version is available. Graphs are acceptable in Excel format.

If you are unable to supply files in the above formats or would like advice on preparing your files, please contact Robin Roberts-Gant on 01865 222746 or email: robin.roberts-gant@ndcls.ox.ac.uk





President's Piece

Allan Wilson

Before I start to draft the Presidents piece for SCAN I usually read my previous article to ensure I do not repeat myself but also to see if I made any rash promises that I need to deliver on in my subsequent piece. At the time of writing for the January edition of SCAN I was planning a trip to New Zealand to deliver FNA workshops. The trip was very successful and highlighted a structured approach to extending roles for biomedical scientists through training and competency assessment. The workshops were sponsored by the New Zealand Government as part of their cancer strategy with the clear objective of training cytotechnologists/biomedical scientists to attend one stop FNA clinics and EBUS clinics and deliver on site adequacy assessment and advising clinicians on additional passes for ancillary tests. In many New Zealand labs this role is currently carried out by Consultant cytopathologists, the NZ government recognised that delivery of this service was under threat from competing pressures for pathologists limited time such as MDT's and diagnostic work. One of the outputs from the workshops were mentoring and training programmes and clear guidance on competency assessment and performance monitoring with "sign off" as competent by Consultant Cytopathologists. There is much to learn from this approach which mirrors the approach to training in cervical cytology with standardised training and regular competency assessment.

Advanced practice such as this can be found in UK labs but it is not widespread, there are still barriers to the delivery of a high quality FNA service which need to be addressed. Extending the roles of biomedical scientists has long been supported by the BAC and your executive is currently working on guidance for laboratories on biomedical scientist roles in diagnostic cytology including on-site evaluation of FNA samples.

June has passed and the expected announcement on HPV primary testing has yet to appear, as Paul has mentioned in his article, a statement in a cancer strategy paper suggests a possible timetable for HPV first implementation. Statements like this with no detail are not helpful to cytology labs; the cervical cytology service is under considerable pressure as laboratories struggle to cope with static workload but declining staff numbers and little recruitment and training. What is required is a clear statement on HPV primary testing and if there is clear evidence that this approach offers benefit to women, this should be followed by an implementation plan. It is not the introduction of HPV

testing per se that threatens the delivery of cervical cytology but the uncertainty and the delay in making a decision. The recent re-organisation of screening in England has delayed the decision making and communication processes and the radical changes in management of screening are taking time to bed in.

The review of screening has also impacted on an announcement on the HTA adequacy study. This study reported in March this year and produced some controversial results. The BAC is awaiting a response from the NHSCSP on the status and interpretation of this study in which many BAC members participated by reviewing slides.

Over the last few months I have had my first taste of the QUATE exam. This exam is similar to the NHSCSP diploma in cervical cytology and has been adopted by several countries as their exit exam before screeners can report negative samples. Mina Desai and I have recently taken over as exam organisers from Peter Smith and Nick Dudding. It has been an interesting experience and has provided a flavour of the standard of training across Europe. Most European countries are still using conventional cervical smears but the move to HPV primary is pushing labs to convert to LBC, this has raised the issue of conversion training and the role of suppliers and laboratories to ensure adequate training and assessment. This is also an issue in the UK as recent "whole lab" conversions between LBC technologies have highlighted variation in assessment after conversion training. This is currently being addressed by NCCETC and guidance should be available before the end of 2015. The next edition of SCAN will include a more detailed review of our experience of the QUATE exam.

And finally; congratulations to Behdad Shambayati who has become the first person to pass the Advanced Specialist Diploma in non-gynae cytology. The exam was held for the first time in June and hopefully will become firmly established in the IBMS exam timetable. This is another step towards formally establishing advanced practice for biomedical scientists in diagnostic cytology; it is worth remembering that this qualification has its origins in a BAC executive meeting and has the support of the Royal College of Pathologists. Particular thanks are due to Tom Giles who helped guide this initiative from a BAC proposal to a recognised qualification. Anyone wishing to sit the exam in 2016 should contact the IBMS or any BAC executive member.

Chairman's Column

Dr Paul Cross



As I write this Chairman's piece, the dust is settling on the recent general election and political life is beginning to resume. Why is this important? The "purdah" that government departments, and the NHS in particular, go into, a state of suspended animation, is now over and decisions that were put off before the election may now begin to be made — possibly. The runes are all pointing to an announcement, at some point possibly later this year, about the introduction of primary HPV screening within the English CSP. The data from the Primary HPV pilot sites, some of which has been presented at meetings, suggests that it works. The recent discussion document "Achieving world class cancer outcomes — a strategy for England 2015–2020" supports the switch to primary HPV screening, amongst many other cancer initiatives.

There is still debate about this, and articles (such as the one by Nick Dudding in this edition of SCAN) do highlight concerns that still exist. The decision, when and if made, would have a huge impact on the CSP, and on laboratories and cytology staff especially. The technology may exist to offer such an HPV led programme, but if adopted we would still need much guidance as to how it would be implemented. The impact on cytology workload and hence staffing levels would be significant. This is nothing not spoken about at nearly every meeting I have been to over the last 5 years by all involved in the screening programme. The BAC, and previously via the BSCC and NAC, are not against progress based on sound science and planning. As such, if proven and approved, then we should not oppose it if it will lead to a better screening programme for the women taking part. We will do whatever we can to use our influence and ensure that such decisions are made on the best science and are made with a full awareness of the implications for all involved. I am aware that some BAC members feel that the BAC is hiding something or not representing them. I can assure you that we are trying to represent Cytology and BAC members on every occasion we can. Some of this input is obvious, but much is not, and with the best will in the world what we say will not always be listened too.

We wish we were. When, and if, major decisions such as this are made, we will do our best to ensure the interests of cytology and those of our members are well represented and hopefully equally well recognised.

The BAC is all for the advancement of cytology, irrespective of professional background, and for education within cytology. Louise Smart has now completed the revised and updated Code of Practice for Laboratories within the Cervical Screening Programme. I must thank her, and her working group, as well as those members and other bodies that responded during the consultation process, on their input. This massive piece of work has taken longer than we had hoped, but it is still relevant to laboratories irrespective of other potential decisions such as mentioned above. We are also working on a statement document about the Roles of Biomedical Scientist Staff within the Provision of a Diagnostic Cytology Service. This hopefully will fill a void in that many areas of cytology have changed but guidance is often outdated and behind the times.

On the education front, we have had a successful cytology workshop, again hosted by Ash Chandra in London, and are working on the October ASM in Liverpool. It seems that many members are finding it difficult to attend such educational events, for many reasons, and the BAC will do its best to take such issues on board and do what we can to make meetings accessible, affordable and value for money.

Whilst my opening paragraph may have depressed some members, I still see a bright future for cytology. The future may not be what we are used to, but progress is never easy and hardly ever without problems. Roles and responsibilities, laboratory configuration and staffing, have all changed out of recognition since I started in cytology and it is changing again. I am not aware of anyone who would want to go back to the "good old days", if indeed they ever truly existed; but equally we are not for change for the sake of it, unless it is proven.

BAC Executive Elections Spring 2015

In line with the periods of office, we invited expressions of interest for three places on the BAC Executive. I am very grateful to Jenny Davies, who has now retired from both the Executive and her cytology post in Manchester, for all her hard work on the Executive, and especially in running the CEC scheme over many years. Claire Geary, who joined the Executive during 2013, unfortunately had to stand down during the year due to work pressures. Tom Giles' place on the Executive was also up for re-election, but I am delighted to say that Tom was happy to put his name forward again. Having invited members to stand, I am pleased to say that we do have two new prospective Executive members in Dave Nuttall and Hedley Glencross. Both will be names well known to members.

Hedley's current role is as an Advanced Specialist Biomedical Scientist at the Cytology Department Queen Alexandra Hospital, Portsmouth, where as well as screening and checking duties, he is the scientific/laboratory lead for diagnostic cytology. He spent 8½ years working for the Institute of Biomedical Science, as their head of membership and latterly the head of examinations. Prior to this, he worked 28 year career in the NHS, as a cytologist and histologist, working in laboratories in both the south and north of England, including 6 months working abroad in Sweden in 1992. He has had various roles including training officer, laboratory manager, screening programme co-ordinator and training school manager. Professionally, he has been an IBMS Council member, the IBMS Specialist Advisor in Cytopathology and sat as the first IBMS nominee to the then BSCC Council. He has been a member of NCC ETC, the exam sub-committee and has completed a full examination cycle for the NHS CSP, from candidate to examiner, lead examiner and finally external advisor/examiner.

His current interests lie in diagnostic cytology and education/training.

Dave has practiced as a Biomedical Scientist since 1979 and achieved FIBMS in 1981. He has previously worked in Cellular Pathology and Electron Microscopy and subsequently as Cellular Pathology Services Manager and Directorate Manager for Pathology in North Wales. He is the current Chair of the Laboratory Services Sub-Committee to the Welsh Government's Scientific Advisory Committee. In this capacity Dave is also a member of the Welsh Screening Committee.

Dave gained the Advanced Specialist Diploma in Cytopathology in 2005 and still practices as a Consultant Biomedical Scientist. In 2008, he joined Screening Division, Public Health Wales as Head of Laboratory Services - leading the Screening Division Laboratory Service and is the Scientific and Technical QA advisor to the Screening Division. He is also a technical assessor for UKAS. Dave is currently working towards a PhD at Trinity College, Dublin, researching the applications of Computer Assisted Screening technologies and family and career commitments permitting, he enjoys competition ploughing and vintage tractor restoration.

These nominations are subject to approval at the AGM to be held at the October ASM in Liverpool. If ratified, I am sure we will all enjoy working with them and using their vast experience within the Executive. We are grateful to all those who stand and work on the Executive, as without their time and energy, which goes unpaid, the BAC would not function. We are always on the lookout for new members and new Executive members, so if you are interested please approach any of the current Exec for more information.



New prospective Executive member Hedley Glencross



New prospective Executive member Dave Nuttall

38th European Congress of Cytology, Geneva, 27–30th September 2014

Dr Paul Cross

The fact that this was the 38th ECC meeting, and yet my first one, was possibly a sad reflection on the meetings I have been going to over the years. I have always had a major interest in cytology, but had never actually ventured from the UK for this. So, having got myself organised I set off to attend. This particular meeting was being held over four days, in the very attractive Swiss city of Geneva. The actual meeting venue was a purpose built conference centre, and within easy walking distance of the city centre and the hotel accommodation.



Amanda Herbert (in natural pose!) at her last Cytopathology Editorial board meeting

The meeting was running for three and a half days all at the same venue for lectures, across three lecture rooms, and workshops, held in two rooms. A very useful delegate handbook (handily pocket sized) allowed planning for an assault on the various sessions, and certainly a military style approach was required to find the right room on occasions. With the possibility of some 35 separate sessions covering topics as wide ranging as Digital Automation in Cytopathology to Terminology of Pancreatic cytology, from Advance in GYN biomarker testing to Primary HPV testing, and from Quality Assurance to Lung cancer there was something for everyone. A total of up to 19 hands on cytology workshops were also available, but at an extra cost to the overall meeting cost.

There were just over 200 posters on show, with viewing times allowed for in the programme, as well as five oral presentation slots for short oral papers. There was also an organised conference dinner, held on Lake Geneva, for those with the stamina. The opening ceremony was a bit of a culture shock with

yodelling and dancing and a St Bernard mountain rescue dog on show!

The quality of the speakers was in general very high, and all talks were done in English, putting to shame my ability to speak in any foreign language. I certainly learnt a lot about basic cytology morphology and day to day diagnostic criteria, as well as more advanced diagnostic techniques that are in use in some centres or are being developed.

The meeting is obviously also a great opportunity to meet up with old friends, and also to make many more new ones. There were about 600 delegates there from all over Europe as well as America and the Far East and Australia. As much was learnt over coffee about how cytology varies around the globe as from the actual lectures themselves.

Many informative and occasionally slightly heated conversations were held in the meeting breaks, but some did overflow to local bars and restaurants as the day wore on. One of my more surreal ones was held on a packed bus going back to the city centre one night.

The coffee breaks allowed for visiting the many trade stands, which were well in attendance, and look at what was available and what may be available soon. Two sponsored trade lunch time sessions were also timetabled, and these were of good quality and not too trade biased! One thing that was very different to UK based meetings was, whilst we had coffee breaks with amazing Swiss confectionery, lunch was not included. On site and local restaurants were



Coffee and commercial area where a lot of the main discussion took place! – Swiss pastries much appreciated

available for those that required greater inner fortitude for the afternoon session.



Lecture in on of the smaller (!) halls (HPV of course!)

The ECC meetings also allow for many European wide society and other meetings to be held, some of which I also attended in my BAC role. One of these was presenting our bid for the 2016 ECC meeting (for which we were successful) as well as a Cytopathology Management board meeting. This was the last one chaired by Amanda Herbert, who has stood down as Editor, but who received many accolades and thanks, and not to mention gifts, from many European colleagues.

My overriding impression was of a really useful and well organised meeting. It was difficult to know which session to go to at times and some hard choices had to be made when some equally interesting sessions clashed. My biggest regret is that this was my first ECC meeting and that I had not gone before! I am looking forward to going to the next one, in Milan in September 2015, and learning from both of these to try and make the 2016 ECC meeting, which the BAC are hosting in Liverpool, the best yet! If you have never ventured to an overseas meeting before and want to expand your cytology knowledge and horizons, then I would most definitely recommend going to these meetings.



Main lecture theatre



poster area — taken early one day before the crowds arrived

BAC Website



Screen Shot BAC Homepage, current

The BAC, when it formed, built on the existing BSCC website and it has served us well for the last four years. Regular visitors to the website will know that it contains much useful information, with a members' area, but its functions are limited by its relatively old design and structure. Its lack of ability to deal with images well is a basic flaw in such a visual discipline as ours!! For reasons such as this, we have commissioned a website company, ArtOnezero, to design and totally revamp our website, making it fit for the modern age. The new website, still in its design stage, is intended to go live at the time of

October ASM. It will allow easy access by all types of computers and smart devices, and will be far more visual and have many new functions. One major change will be the ability to host more educational material, with feedback, and allow for images throughout all the pages. The members area will be expanded, and helpfully of more use to members. We are keen to include material from all members, as well as accommodate new ideas, so if you have any thoughts, comments or material you would like to contribute, then do contact us via the usual email address.



Screen Shot BAC Homepage, proposed

Time for a few home truths? A personal view

**Nick Dudding, Consultant Biomedical Scientist,
Sheffield Teaching Hospitals.**

As you all will be aware the NHSCSP will at some point this year announce a move from a programme that is driven by primary screening with cytology to one where primary screening will be carried out by testing for high risk Human Papilloma Virus (HPV) types. Despite what you may have read, even in this journal, this move will be made despite increasing evidence that HPV testing has a sensitivity for high grade CIN some way below what you will have been told and evidence from our own ARTISTIC trial demonstrating that in England the sensitivity of cytology and HPV are comparable⁽¹⁾. ARTISTIC, not only showed a sensitivity for cytology for high grade CIN of over 90% but those women in the LBC arm of the trial had a lower rate of high grade CIN at three years than those in the HPV arm. How many of you knew this I wonder?

Why make this move then? Because HPV testing is more cost effective. Firstly, it needs far less of you, more importantly however it will also allow screening to be carried out at six year intervals rather than current mix of three and five years. The authors of the ARTISTIC trial, undeterred by the results at three years continued for a second round and were able to report that the protective effect of a negative HPV test was far superior to that of a negative cytology result (risk of CIN 2+ at 6 years was 0.87v 1.41% respectively)⁽²⁾ allowing screening intervals to be extended and screening costs reduced, even with allowing for a possible increase in the overall number of colposcopies. What is wrong with this? The NHS is cash strapped and cost savings rightfully need to be made. My answer is simple — uncertainty! A number of studies document that the sensitivity of HPV testing is not high enough to warrant such extended intervals. In our aforementioned ARTISTIC trial 15% of CIN II+ lesions tested negative for HPV. In the Swedish and Dutch trials it was 14%^(3,4). In the recent Food and Drug Administration (FDA) application by Roche for the Roche Cobas system to be validated for use in primary screening alone in the United States (US) how many of you were aware that verification bias-adjusted sensitivity of the proposed screening algorithm for CIN3+ detection was 27% for women 50 and older and 39% for women 40 and older?⁽⁵⁾ For younger women the verification bias-adjusted sensitivity of the new cervical screening algorithm was only 53% for women 30 and older and 58% for women 25 and older. This is the age group we will be screening. Data looking at what might happen with any extended intervals is also starting to come on line

from co-testing in the US. Results from Magee hospital, Pittsburgh shows that comparing HPV test results immediately prior to a diagnosis of CIN 2/3 with those taken three years earlier: they show that while 97% were HPV positive immediately before diagnosis only 83% were positive three years earlier⁽⁶⁾. A similar figure was observed for glandular lesions. Such data relating to previous rather than concurrent HPV results provide an insight into the risk of extended screening intervals.

Interrogation of HPV performance on cervical cancers is even worse. In the UK ARTISTIC trial all five cervical cancers diagnosed 2.5–8 years after the onset of the study occurred in the HPV arm. None in the cytology arm. More recently Blatt *et al*⁽⁷⁾ document that 98 of 526 cancers (19%) had had a negative HPV test within 12 months of diagnosis. Katki *et al*⁽⁸⁾ report 27 of 87 (31%) women with carcinoma had a negative HPV test in the preceding 3–5 years. Even in the paper by Ronco *et al*⁽⁹⁾ which analysed four European trials with a total of 107 cancers; 8 of 19 (42%) cervical cancer cases diagnosed in the HPV trial arms 2.5–8 years after enrolment had tested HPV-negative at baseline. Interestingly a recent Public Health England request for participation in their surveillance activities to monitor the HPV immunisation programme against cervical cancer showed that in tissue from cervical cancer cases diagnosed in women under 30 years old only 73 of 87 cases actually tested positive for HPV. In other words 16% did not test positive for HPV.

All these findings seriously question the safety of extended screening intervals, not least in young women. When pondering this we must also consider the demographics of the disease in the UK. Prevalence of CIN3 and invasive cancer in England is highest in women aged 25–29 years. 46% of ALL cases of severe dyskaryosis occur in women aged under 30 while there were 10,000 cases of CIN in this age group.⁽¹⁰⁾ HPV testing will start at age 25 years. False-negative HPV tests will place many of these women at a risk of developing cancer before their second test at age 30 or 31.

There are other variables that need to be taken into account. Perhaps the most important is the variability of the different HPV platforms. Data from the Horizon studies in Denmark show that not all platforms perform equally. In a direct comparison of

four platforms (HC2, CLART, Roche Cobas and Aptima) only 29% of samples tested positive on all four platforms⁽¹¹⁾. In Sheffield for instance we found a doubling in the rate of HPV positive women at test of cure following a change of HPV platform⁽¹²⁾. Choice of platform could therefore be absolutely paramount for safe screening but head to head comparison of platforms is something that has received scant attention in the six sentinel sites and I suspect that laboratories will be left to choose their platforms on which company is offering the best deal rather than for sound clinical reasons. In truth we should choose the platform that gives the best sensitivity / specificity balance or given the extended screening intervals being planned even this might be abandoned to give the platform that merely operates at the best sensitivity?

The other issue that has received scant attention is defaulting from follow up. This was raised in a letter to *Cytopathology* by Hew Llewellyn⁽¹³⁾ but is barely covered by papers looking at the potential HPV testing but the current English pilots rely very heavily on women who are HPV positive, cytology negative returning for subsequent test at 12 and / or 24 months. I do not have data from the sentinel sites but in the original ARTISTIC trial which was designed to mirror actual screening practice only 62% of hrHPV-positive/cytology-negative women were retested at 12 months. Default rates on these lines could seriously compromise the safety of the programme.

In summary; given what we know about the relative merits of HPV testing as the primary screen, the variation in performance of different platforms and the demographics of high grade CIN I would suggest we offer a cytology / HPV co-test at age 25 at least. The added cost will be minimal and given the rates of CIN III and cancer within young British women not doing this will undoubtedly result in a significant number of women getting cancer by the age of 30 and this will be unforgivable.

Finally, please remember one thing...many, including those within the BAC have been drawn into making a false comparison. We have all being diverted into comparing the performance of HPV and cytology at 5 or 6 yearly screening intervals. What your Executive should be concentrating on is how HPV testing with cytology triage at 5 or 6 years compare with what we have now! If we don't co-test at age 25 at least I predict that the new programme will not perform any better and whilst acknowledging that the introduction of vaccination for HPV will significantly change the dynamics of screening it would be a disaster if cost savings mean English women have less protection from screening in 2017 than they enjoyed with the introduction of screening in 1988.

These are the views of myself and are entirely personal. They do not reflect the views of colleagues at Sheffield Teaching Hospitals in any way.

N Dudding

Ed — In the interests of balance, the case in favour of primary HPV screening can be found as part of the NSC consultation process (see elsewhere in this edition.)

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Case Study

**Dr J Diane Hemming, Consultant Cellular Pathologist,
Gateshead Health**

Clinical Details

The patient was a 56 year old woman with Type 2 diabetes who had been referred for fine needle aspiration cytology of two large discrete hypo echoic nodules identified in a multinodular goitre. The more superior nodule measured 22 x 24 x 25mm and the more inferior 35 x 47 x 50mm. The patient was otherwise well.

What is the diagnosis? How would you confirm your diagnosis?

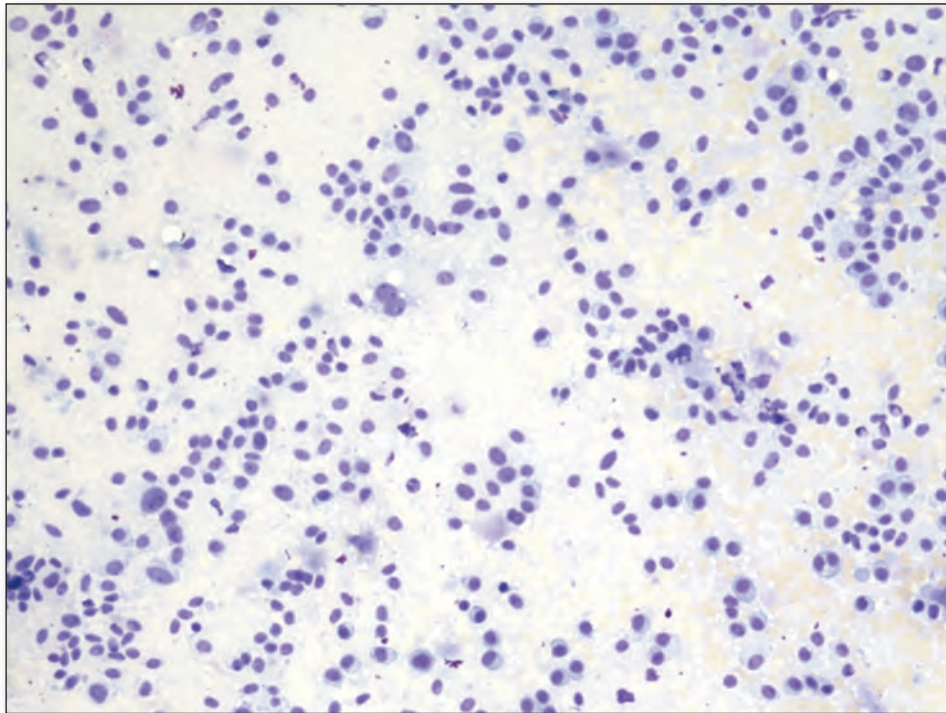


Image 1.

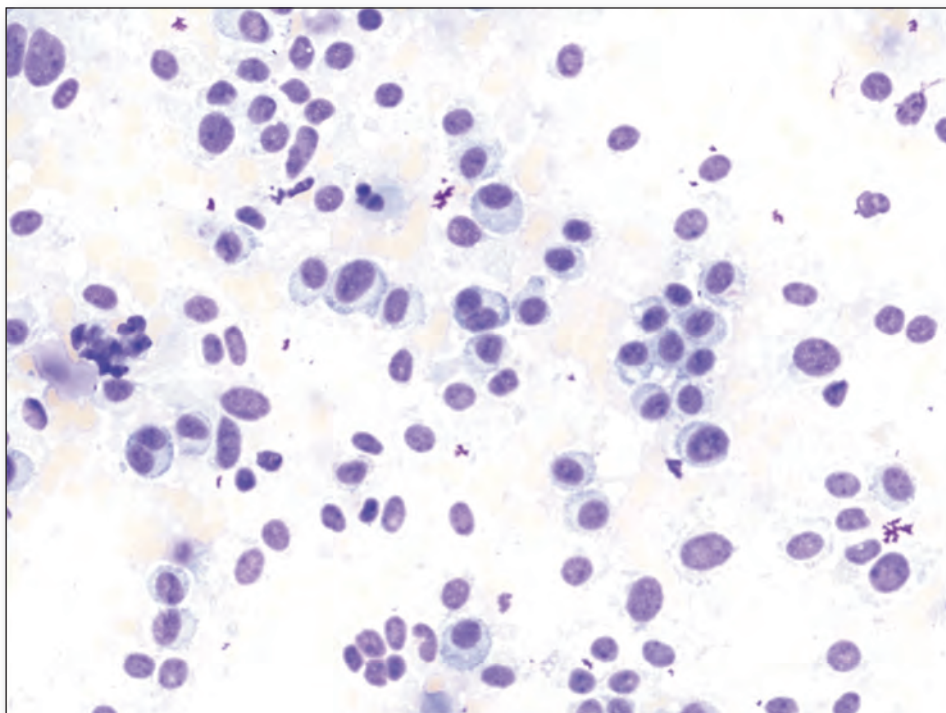


Image 2.

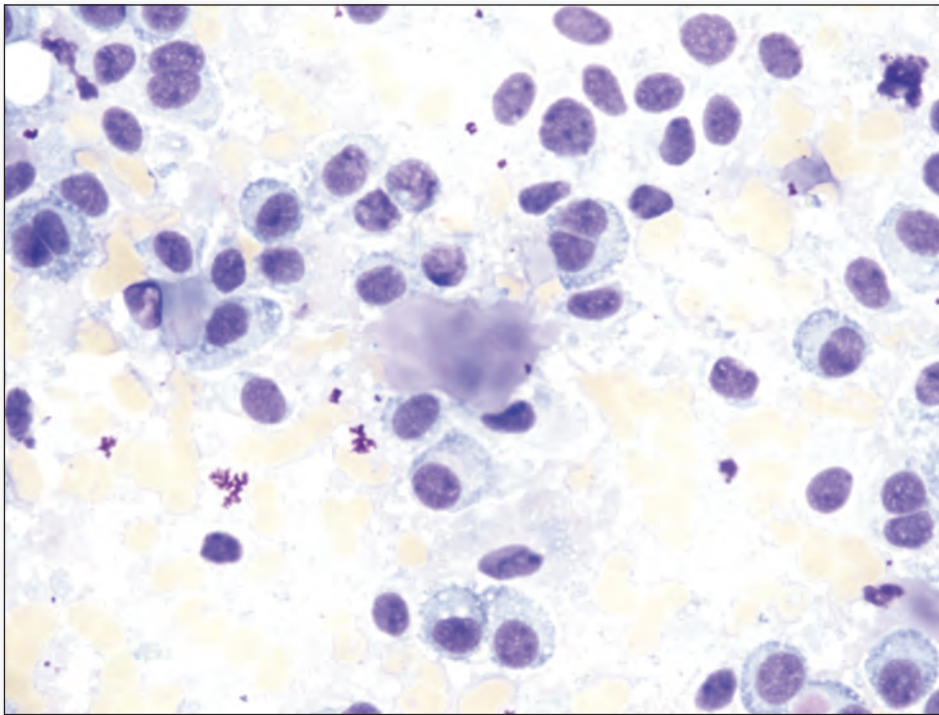


Image 3.

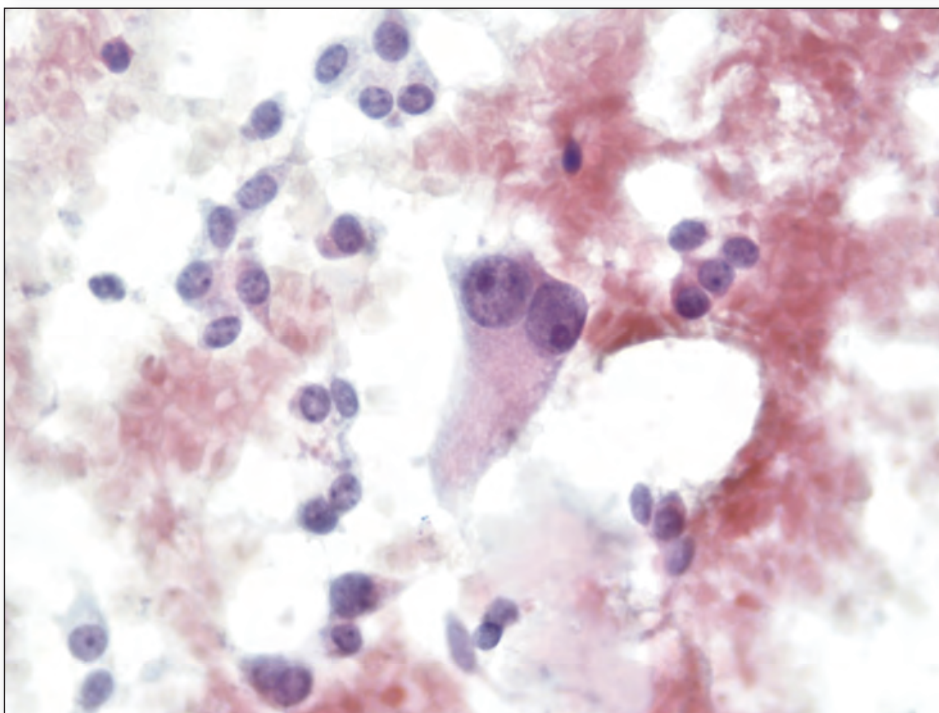


Image 4.

(Answers on page 23)

**CEC Local
Officers
(Autumn 2015)**



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In the absence of a local officer in your area, please send CEC items directly to me at the address below.

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**Please remember to make a copy of
everything before it is sent — there
have been one or two losses in the post.
Thank you**

CEC News – Autumn 2015

Helen Burrell

It was with slight trepidation that I took over the role of Administrator from Jenny who had done such an amazing job over the last 11 years. I'm finally feeling like I'm getting to grips with running the scheme although it's still early days! Thank you so much to those of you who have been very understanding when there was some delay in getting books/certificates/JBL's back to you when I first took over. Your patience was much appreciated!

I think most people are happy with how the scheme works, but if not I'd love to hear from any of you who have suggestions for improvements or changes to the scheme.

Journal Based Learning

I've written the JBL for this issue of SCAN, there are 10 questions but this time there are 20 credits available.

For submission, photocopy the page and send your answers to me or your local officer if you have one. I'm also happy to receive scanned copies via email if you find that easier.

Remember to keep a copy if you post it. Please include your name, BAC membership number and your return address as I'll need to send you a label for your book.

Membership Details

Please email or write to Christian Burt if any of your contact details change.

Email: mail@britishcytology.org.uk

**BAC Office,
12 Coldbath Square,
London EC1R 5HL**

The role of cytological follow-up after radical vaginal trachelectomy for early stage cervical cancer

K. Edey *et al*, *Cytopathology* 2014, **25**, 95–100

1. What is a radical trachelectomy? (2)
2. What are the eligibility criteria for this procedure? (3)
3. When would a woman be counselled against fertility preserving surgery? (1)
4. What could lead to diagnostic difficulty in cytology samples post trachelectomy? (4)
5. In this study what percentage of samples contained only squamous cells? (1)

-
6. Give two reasons why endocervical cells might be seen in a cytology sample post trachelectomy (2)

 7. What complications can arise as a result of the presence of a cervical suture? (2)

 8. Cytology samples post-trachelectomy are not tested for high risk HPV. Why is this? (1)

 9. In this study what protocol for cytology follow up was deemed most appropriate for women post trachelectomy? (2)

 10. After completing trachelectomy follow up, when should a woman continue to have regular cervical screening and how should this be done? (2)

Name..... CEC number

Back to basics – Non Gynae cytology

**Beverly Crossley, Consultant Biomedical Scientist,
St James Hospital, Leeds.**

Non gynae cytology can be used widely to provide diagnoses in symptomatic patients or those at increased risk of disease. As the treatment of cancer has become targeted and personalised, the use of non gynae cytology together with ancillary techniques has become more important. Cytology has the advantage over more invasive procedures as it can not only be diagnostic but can be used to repeatedly examine and monitor disease during treatment. Traditionally non gynae cytology samples have been prepared and pre-screened by the staff practicing gynae cytology but the centralisation of many of the gynae cytology services, together with the transfer of the staff has left many departments without the required expertise. With the challenges these departments will now be facing, it is perhaps a good time to get back to basics and think about the principles of sample preparation and quality in non gynae cytology.

In some body sites cells may naturally exfoliate and a sample can be easily collected, a good example of this is a voided urine. However the collection of most samples will require intervention, which may be only minimally invasive but will still be uncomfortable for the patient and will require valuable clinic time. For this reason we need to ensure that we get as much information as possible from each sample to be able to provide a comprehensive diagnosis and preparation quality is crucial to this. The sample needs to be processed in an appropriate manner, optimally diluted and excess red blood cells need to be removed. It may sound obvious but samples should be prepared so that diagnostic material is clearly visible.

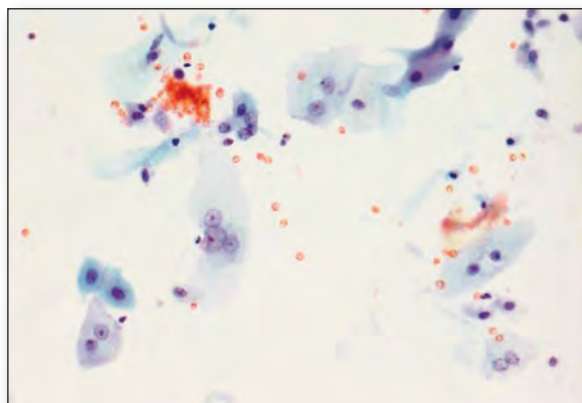
There are many preparation methods available for non gynae cytology, from direct spreads to semi-automated liquid base techniques. All except direct spreads initially concentrate the cells and then employ techniques to produce a thin layer of cells. The semi-automated methods such as Surepath and Thinprep have advantages over manual centrifugation methods as they remove the need for operator dependent dilution, which is a critical step in creating a good quality preparation. Many of the commercial non gynae preservatives lyse red blood cells removing the need for additional steps. A single layer of cells is achieved by diluting the deposit until it is just cloudy. Achieving this can be intimidating,

but you cannot really over dilute a sample. If the worst happens you can always centrifuge it again and start over. If the deposit is not sufficiently diluted the preparations will be over thick and cellular detail will be obscured. Below is a simple dilution chart with suggested volumes of diluent to deposit size which should result in a monolayer.

Deposit Size	Dilution
Pin head	0.5 – 1.0 ml
Large Pin head	1.0 – 2.0 ml
Match head	3.0 – 5.0 ml
Larger than above	5.0 ml then re-dilute to <u>just turbid</u>

It is important to know what cells are found in samples from the different body sites in order to produce good quality, adequate preparations. If the expected and necessary cells are absent or obscured, the sample should be re-prepared to avoid an inadequate report and the need for a repeat sample. We will take a look at the cells you would expect to find in the most common non gynae samples.

Urine cytology was widely used for industrial screening of workers in the dye industry and is now commonly used to investigate haematuria and in the diagnosis and follow-up of urological malignancies. As urine passes from the kidney and eventually out through the urethra, urothelial and squamous cells are exfoliated. Samples may be obtained by collection of urine into a container, or via instrumentation methods such as bladder washings or catheterisation. It is important to know how the sample was collected as instrumentation methods can produce very cellular samples which may lead to a false positive diagnosis.



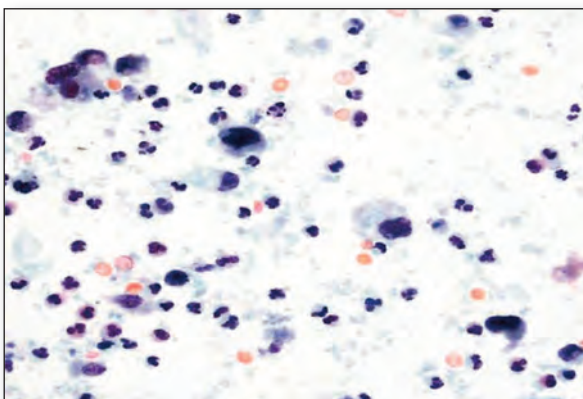
Normal urothelial cells in urine - PAP

Normal urine samples may contain cohesive transitional cells, white blood cells and squamous cells, but these will often be scanty. Due to the nature of the sample the cells may show degenerative changes which may make interpretation difficult. This can be minimized by collecting the sample into a preservative such as 50% alcohol. Casts may be seen and in samples from men, corpora amylacea, a hyaline material found in the prostate may also be present. Casts are important as they can be indicative of renal damage, they are tubular in shape and may be hyaline, tubular, granular or red cell type.



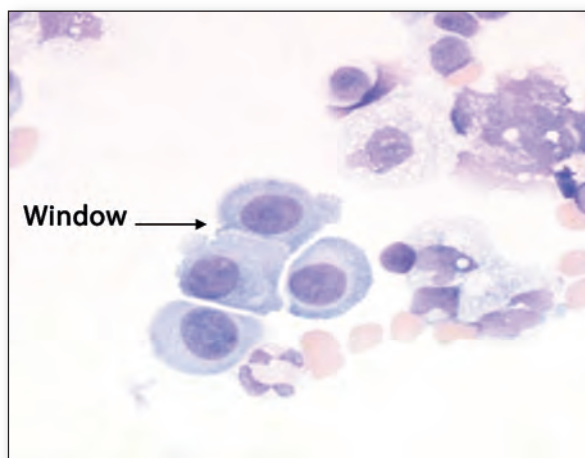
Cast in urine

Urinary cytology is of limited value in the diagnosis of low grade papillary transitional cell carcinoma (TCC) as the cells often appear near normal. In high-grade TCC or carcinoma in situ (CIS) there is increased cellularity, with poorly cohesive sheets of urothelial cells with enlarged and densely hyperchromatic nuclei. Single abnormal cells are also seen. Malignant squamous cells may exfoliate from a TCC which has squamous differentiation or a primary squamous cell carcinoma of the bladder. In follow up urine cytology the effects of radiotherapy and chemotherapy are often seen and include cell changes with nuclear enlargement, multinucleation, cytoplasmic vacuolation and bizarre cell forms. A lymphohistiocytic reaction with giant cells is often seen following treatment with Bacillus Calmette–Guérin (BCG).



TCC urine -PAP

Serous cavity fluids are common samples and include ascitic, peritoneal, pericardial and pleural fluids. Each cavity is made up of a double-layered serous membrane, visceral layer (inner) and parietal layer (outer). The serous membrane is made up of loose connective tissue with capillaries, lymphatics and nerves, and is covered by a simple lining of mesothelial cells. In some disease processes the space between these two linings collects excess fluid and this may be sampled. Alternatively the samples are washings where the fluid is instrumentally introduced and then sampled. Unremarkable fluids contain mesothelial cells, macrophages, neutrophil polymorphs, lymphocytes, eosinophils and red blood cells. Mesothelial cells can be seen as single cells or in flat uniform sheets of cuboidal cells with translucent cytoplasm and round or oval, centrally placed nuclei. They have a prominent, smooth nuclear membrane and may have multiple nuclei especially when reactive. Reactive cells may also be vacuolated and contain mitoses. Single cells butt together like soap bubbles, forming a space which is known as a 'window'. This is more easily seen in air dried giemsa preparations. Eosinophils may be present and large numbers are associated with allergic conditions such as asthma or seen with parasites. Lymphocytes are common but where they predominate indicate a chronic infection.



Mesothelial cells, air dried giemsa showing a window

Malignant fluids will often have two distinct populations of cells, one normal mesothelial and one abnormal. Malignant cells may be pleomorphic, enlarged with high nuclear cytoplasmic ratio and there may be macronucleoli. Malignancies in body cavity fluids are often metastatic and may have characteristic features of the primary tumour such as melanin pigment or mucin. Adenocarcinoma, is the most common tumour found in fluids. There is increased cellularity with 3-dimensional clusters, nuclear irregularity and coarse chromatin. Cells may form acini (gland openings). Squamous carcinoma is uncommon in body cavity fluids but any tumour type

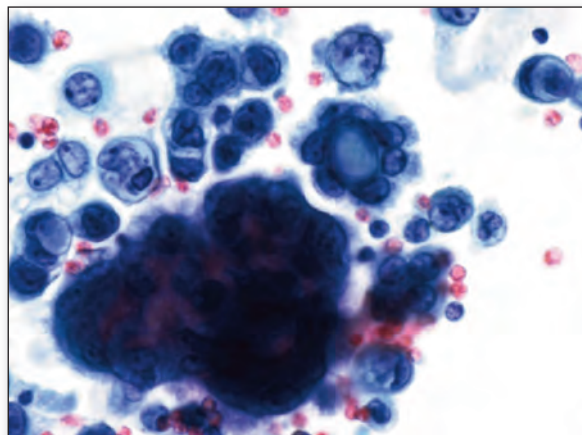
can be seen when the primary tumour metastasise including lymphoma, melanoma and sarcoma.

Respiratory samples are normally from symptomatic patients and are used for confirmation of benign conditions or malignant disease. Common respiratory samples include sputum, bronchial washings, brushings and fine needle aspirates. Sputum samples are normally received from respiratory physicians and are discouraged from general practice as unless collected correctly are often inadequate. Sputum samples must include carbon containing macrophages to be considered adequate. Washings are often taken together with bronchial brushings where malignancy is suspected and the brush can be directed to the most abnormal area at bronchoscopy. Unremarkable respiratory samples will contain respiratory epithelial cells (ciliated glandular cells) which may show multinucleation and bronchial epithelial cells in flat ribbons or sheets. Macrophages are common and may contain carbon or haemosiderin. Samples may also contain lymphocytes, neutrophil polymorphs and red blood cells. Squamous cells are less frequent except in sputum samples.

Basically respiratory primary tumours are divided into non-small cell and small cell carcinomas. Non-small cell may be squamous or glandular and it is

important for treatment options to differentiate between the types. . In squamous carcinoma the cells have abnormal nuclei, bizarre cell shapes and may show abnormal keratinisation. Adenocarcinoma cells form 3-dimensional clusters and may form acini or papillary structures. Nuclei are irregular with coarse chromatin and the cytoplasm is abundant and pale. Small cell carcinoma cells are small (hence the name) about the size of lymphocytes which show moulding and may be arranged in linear cords. Characteristically they have coarsely stippled chromatin which is often referred to as salt and pepper pattern. It is also important to remember that many tumours metastasize to the lungs and malignancies identified may not be primary.

So in summary the preparation method used should be appropriate for the sample type and allow the appropriate cells to be visualised, allowing diagnosis. The sample should be concentrated to improve cell yield and red blood cells should be removed. The sample thickness should allow clear visualisation of cells particularly the nuclei and dilution is the critical step when using centrifugation methods. It may be tedious and time consuming to produce a good preparation but remember there is a patient at the end of every sample who is relying on you to do the best you can to enable diagnosis.



Adenocarcinoma cells in respiratory sample

Major documents relating to the Cervical Screening Programme

Dr Paul Cross

Over the recent months three major documents have been issued that relate to the cervical screening and cancer services in general.

The National Screening committee has recently started a formal consultation process about the possible conversion from a cytology based cervical screening programme to a primary HPV screening programme. The statement from the NSC reads:

"The UK NSC is commencing a public consultation on whether to change the primary screening test used within the Cervical cancer screening programme. The programme currently adopts liquid based cytology as the primary screen. The proposal is to replace this with testing for human papillomavirus (HPV) as the primary screening test."

The BAC are planning to respond to this and would welcome any comments from members before we do. If you wish us to consider your comment please send it to the usual BAC email address, heading you email "BAC Consultation on Future of Cervical Screening" by 9th October. The closing date for the consultation is 2nd November. There are several documents that can be found via the weblink below, and they make the case for such a change, and offer a very different point of view to those outlined elsewhere in this journal.

Link:
<http://legacy.screening.nhs.uk/cervicalcancer>

The other two have been released as documents for potential adoption and use.

The long awaited HTA report on LBC sample adequacy entitled "A study of cellular counting to determine minimum thresholds for adequacy for liquid-based cervical cytology using a survey and counting protocol" was issued in March this year. This report proposes a minimum cell content to constitute an adequate LBC sample for use in the CSP. It also notes some differences in cell detection at varying cell content and abnormal cell load.

Link:
<http://www.journalslibrary.nihr.ac.uk/hta/volume-19/issue-22#abstract>

The Independent Cancer Taskforce has published "Achieving world-class cancer outcomes: a strategy for England 2015–2020". This report sets out recommendations for a new cancer strategy for England. It has many suggested areas across the whole of the cancer pathways from screening/detection to treatment/support to improve cancer outcomes but specifically in section 5 on screening recommends, if adopted by the NSC, the rapid roll out of HPV as the primary screening tool and also to monitor if the upper age of screening remains appropriate.

Link:
<http://www.cancerresearchuk.org/about-us/cancer-taskforce>

If these latter two documents are adopted nationally, and within the CSP in particular, they would have potentially a major impact on how the CSP is delivered.

Back to the future...

Dr Paul Cross

This edition of SCAN will mark 26 years of SCAN being published. The very first edition of SCAN was sent to NAC members in January 1990, in what may seem a different era to many (and before possibly some of our members were even born!). I am indebted to Jenny Davies who has found a copy of this very first SCAN, which is partly repeated below. This four page newsletter was launched nine months after the setting up of the NAC, and at that time membership was around 200, composed equally of IMLS (BMS of today) and cytoscreeners, with *"a smattering of don't knows and doctors"*. Remember this was a time of financial tightening, with a Government led by Mrs Thatcher, and before formal QA, EQA, and with the development of examinations in cervical cytology for staff just beginning. A different time in many ways to now.

The newsletter outlined the planned inaugural meeting, held over a weekend, an NAC tradition. The Executive meeting discussed the then changes in the NHS highlighting *"the major problems which all groups are experiencing during this time of change in the Health Service, this being that staff have become increasingly disillusioned and demoralised under growing pressures, and are therefore anxious for better representation of their interests and professional needs."* How this rings true now to many of us also! It was a time of great change within the Cervical Screening Programme in 1990, and topics such as bandings, EQA and training were of importance. Specific task force groups were set up to by the NAC into *Laboratory manuals and Safety codes* and *Computers and Information systems*. These were in many ways the forerunners of CSP related documentation, and very closely allied to the BSCC and other professional body publications. At this time there was no formal QA or national structure for the CSP. It was around this time that the National Co-ordinating Network (NCN) initiated by (Professor) Muir Gray was developing. This coalition of the willing was of like-minded professionals who wanted the CSP to be better co-ordinated and developed, and was in essence the embryonic National Office and QA set up all in one. The NCN publication, *Links*, had yet to be published, and older members may remember the meetings held in London in late December that the NCN ran. Much

was learned in the formal lectures at these meetings, but in many ways far more was learned from colleagues over the coffee breaks!

Unsatisfactory smears was also topical in 1990, and the joint statement of the BSCC and BSCCP was referred to, discussing in particular cell content and coverslip size. In many way the discussion of what makes an adequate cervical sample for the detection/exclusion of cervical pre-cancer is still up in the air, despite the recent HTA document referred to elsewhere in this edition of SCAN. Perhaps this debate will always be had!

The newsletter ended with a statement from the then NAC President (Jan Gauntlett) who looked forward to a new era for cytology, as well as a new organisation. Times have changed, and our challenges may be different but in many ways they are the same. The then fledgling NAC was finding its feet and becoming a major player in cytology, and continued to do so for many years. The BAC is similar in still developing, building on the best of both the NAC and BSCC. Who knows what this edition of SCAN will seem like in 26 years time to the cytologists of the future!



Life after cervical cytology?

Three tales from Wales

By Helen Burrell

We have seen cytology change and develop over the last decade and with the prospect of HPV primary screening and the effects of HPV vaccination on the horizon many staff working in cervical cytology are worried about their future career in cervical cytology.

In this article I have spoken to three people who found themselves faced with the dilemmas and challenges associated with a number of cervical cytology lab mergers back in 2011 in Wales.

Teresa Russell, James Peaker and Mimi Hockey are all Biomedical Scientists who all worked for many years in cervical cytology but for whom their career path has taken a change — but has it been a change for the better?

I interviewed them to find out what choices they made and how things have changed for them 4 years on.

Tell me a bit about what happened in 2011?

Teresa: Provision of the gynae cytology service in Cardiff was relocated to Llantrisant. I decided to stay in Cardiff to continue the non-gynae cytology service.

James: When the gynae services were centralised in Wales I stayed behind and joined histology to look after the non-gynae cytology with Teresa.

Mimi: I had worked in both gynae and non-gynae cytology since 2008, but I decided to move to Llantrisant to work in cervical cytology in 2011.

That must have been a very unsettling time, how did you feel?

James: I was apprehensive and had no firm idea where I would be placed within the new structure.

Teresa: My preference was to continue with non-gynae but the decision to stay was made difficult as it meant parting from a very good team who I considered my friends.

What were the main challenges early on?

Teresa: It was difficult to maintain the non-gynae service with only the two of us, so the challenge was to integrate the service into cellular pathology and recruit



more people into cytology.

James: In 2013 the cellular pathology services also merged and we had to move to another hospital.

Mimi: Following consolidation of the laboratories there was an increased emphasis on productivity and I found it a challenge to further my career through education and promotion.

What are you doing now, are you still in cytology?

James: Yes I now primary screen non-gynae, I report some of the negative samples as well as supervising prep and the general running of the section.

Teresa: I am cytology section lead so I manage the day to day running of the section. I gather information for audits and workload statistics, review and amend SOP's, training and competency assessments as well as some non-gynae primary screening.



photos of Cardiff by Katherine Black



Mimi: This year I left cytology and I now work in Welsh Transplantation and Immunogenetics Laboratory as a Healthcare Scientist

What do you miss about your days working in cervical cytology?

James: The people I used to work with

Mimi: I miss my friends and colleagues as well as the work which was enjoyable and challenging.

Teresa: I miss the people I worked with, but also colleagues from all areas involved with the cervical screening programme. I also miss the standardisation of the service. Non-gynae cytology is beginning to produce quality standards but has a long way to go before it matches that of gynae cytology.

What do you enjoy most about your current job?

Teresa: The variety of samples and the opportunity to primary screen. We work in a training hospital and benefit from any teaching sessions organised.

James: I like the variation in sample types and the range of diseases we come across. We have a closer relationship with clinicians and our pathologists.

Mimi: I am enjoying the challenge of learning new skills and working in a different area of medicine, as well as working with good new friends and colleagues.

How do you see your role developing in future?

James: Recently I've been involved in the RCPATH BMS Histopathology reporting pilot study (I'm in my first year). The end goal would be for me to be able to cut up and report gastrointestinal histology samples, but cervical histology is also an option. My previous cytology microscopy has made the transition to histology microscopy relatively smooth, however finding the time needed has been a challenge.

Mimi: At the moment I am working in Molecular testing which is used in combination with serology to type HLA and HPA alleles which are used in solid and bone marrow transplantation.

Teresa: Pathology is evolving with Molecular Pathology, Molecular Genetics and Personalised medicine. Non-gynae is in the thick of it with EGFR and ALK mutation testing and a number of lung studies. I do enjoy the challenge of building the service within the cellular pathology department and planning for the future of the section after I retire.

What advice would you give to people who are worried about their future in cytology?

Mimi: I would suggest they press for information from managers with regards how the discipline is going to move forwards. Then they can look at all the possibilities whether that means staying where they are, re-deployment or looking for something new that can utilise their skill set.

James: Take the opportunities that are presented to you but accept that every job will have its up and down sides.

Teresa: Cytology has changed a lot in the last 33 years but in doing so it has taught me new skills. Cervical cytology is evolving just as other disciplines, not disappearing. The knowledge and skills that you have acquired working in cytology are transferrable not only to other pathology disciplines but also outside the NHS. Not just interpretive skills but skills and knowledge of training, working to quality standards, screening programmes are just a few. There is therefore more than one path leading from the field of cytology that you can take if you wish.

I was going to think of some wise words to finish off this article, but I think Teresa's final comments say it much better than I could, thanks T!

Thanks to Teresa, James and Mimi for taking the time to share their experiences with me.

Case study answer

(see page 10)

The aspirates from both nodules were highly cellular with no colloid identified in the background (Figs 1 and 2). The cells were present singly with only one or two loose small acinar structures seen. The majority of cells had a plasmacytoid morphology with some cells containing granular cytoplasm. Scattered spindle cells were present (Fig 4) as well as binucleate and multinucleate forms. The nuclear chromatin was granular with some cells containing nucleoli. Occasional intranuclear inclusions were noted. Amyloid like material was seen on the Giemsa (Fig 3).

The FNAs from both nodules were classified as THY4, highly suspicious of medullary carcinoma. Immunocytochemistry was not performed but the clinician was advised to take blood for calcitonin levels. The serum calcitonin level was grossly elevated at 19,205ng/l (NR 0-11ng/l).

The patient underwent a total thyroidectomy with selective lymph node dissection at the local cancer centre. Subsequent histology confirmed a medullary carcinoma measuring 60mm with vascular invasion and metastasis to one local lymph node (pT3 pN1b R0). There was background C-cell hyperplasia. It has been advised that a genetic predisposition be considered clinically. Medullary carcinomas can be familial and are also associated with multiple endocrine neoplasia syndrome (MEN syndrome), IIa or IIb.

When considering the differential diagnosis of thyroid lesions the cytologists should be aware of the oncocytic variant of medullary carcinoma where the cells have a large amount of granular cytoplasm and can be confused with Hurthle cell neoplasms. The spindle cell variant of medullary carcinoma may be difficult to differentiate from metastatic sarcoma, spindle cell carcinoma and primary thyroid anaplastic carcinoma.

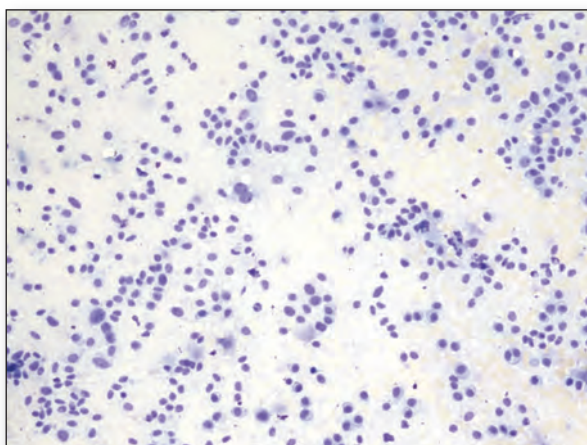


Figure 1.

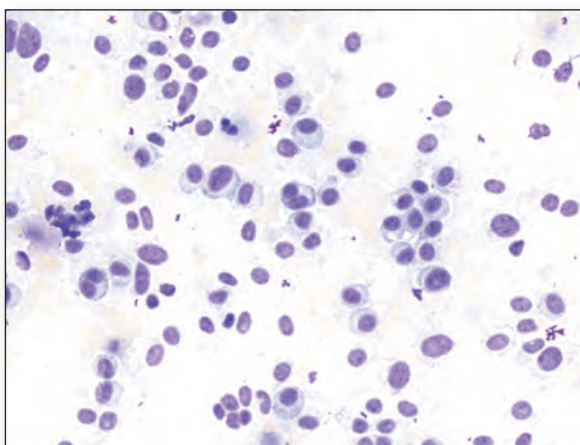


Figure 2.

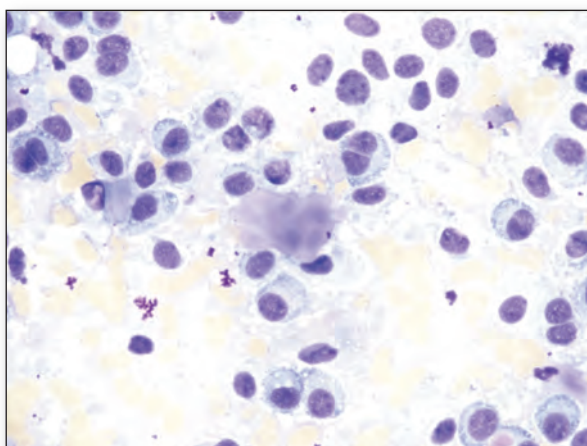


Figure 3.

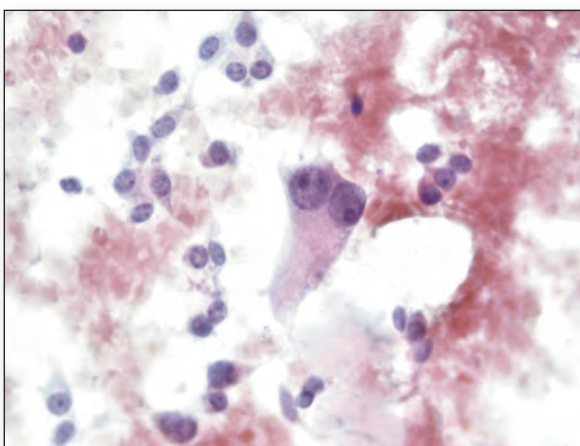


Figure 4.

BIRMINGHAM CYTOLOGY TRAINING CENTRE

All BCTC gynaecological cytology courses are provided in SurePath *and/or* ThinPrep LBC

Please see our website for full list of courses: www.bwnft.nhs.uk/professionals/cytology-training-centre/courses/course-calendar

IBMS RCPATH CPD accredited courses as appropriate

INTRODUCTORY COURSES FOR NHSCSP DIPLOMA IN CERVICAL CYTOLOGY

4-week course—Provisional dates 8-19 February 2016 & 7-18 March 2016

FOLLOW-ON COURSES FOR NHSCSP DIPLOMA IN CERVICAL CYTOLOGY

2016 dates to be arranged if required

PRE-EXAMINATION COURSES FOR THE CITY & GUILDS/NHSCSP DIPLOMA IN CERVICAL CYTOLOGY

25-27 August 2015, 18-20 January 2016

UPDATE COURSES IN GYNAECOLOGICAL CYTOLOGY (ThinPrep & SurePath)

7 September 2015—Cytology of Squamous Lesions

15 October 2015—Invasive Lesions - Squamous & Glandular

9 November 2015—Cytology of Glandular Lesions

2016 dates topics tbc:

25 January 2016 (Checkers), 22 March 2016, 21 April 2016, 16 May 2016, 27 June 2016, 15 September 2016,
17 October 2016, 29 November 2016

NON-GYNAECOLOGICAL CYTOLOGY MASTERCLASS—Dr Glen Dixon

19 April 2016

Ideal for BMSs or medical staff requiring an update

ADVANCED PRACTITIONER IN GYNAE PATHOLOGY

2016 dates to be confirmed

BIRMINGHAM HISTOPATHOLOGY COURSE

6-18 June 2016

(course includes optional Saturday & Sunday am for personal revision)

This two-week course provides topic based lectures on systemic pathology, slide review of selected cases followed by discussion and a revision session including mock exam in preparation for the FRCPATH Part 2 exam.

GYNAECOLOGICAL CYTOLOGY FOR TRAINEE PATHOLOGISTS (StRS)

3-4 September 2015, 29 February-1 March 2016, 12-13 September 2016

The programme for this course is a combination of lectures workshops and multiheader sessions.

Includes a mock exam and is particularly suitable as revision for the Certificate in Higher Cervical Cytology Exam

NON-GYNAECOLOGICAL CYTOLOGY FOR TRAINEE PATHOLOGISTS (StRS)

8-12 September 2015, 22-26 February 2016, 5-9 September 2016

(course includes optional Saturday am for personal revision)

The programme for this course is comprehensive and includes the salient aspects of diagnostic non-gynaecological cytology. This course includes a mock exam and is particularly suitable as revision for the FRCPATH Part 2 exam

WEST MIDLANDS AUTOPSY PATHOLOGY COURSE

2016 date(s) to be confirmed

INTRODUCTORY COURSE FOR ST1s

30 November-4 December 2015, 5-9 December 2016 (provisional)

Introduction to Gynaecological and Non-Gynaecological Cytology including Autopsy element

LECTURE SERIES IN GYNAECOLOGICAL PATHOLOGY

Pathology of Ovarian Epithelial Tumours 11 September 2015

Update for consultant pathologists and senior trainees with an interest in gynaecological pathology.

TRAINING OFFICERS' MEETINGS: 11 December 2015, 10 May 2016, 25 November 2016

LBC Conversion Courses, Ad hoc workshops and Off Site workshops can be arranged on request—please contact BCTC
LBC Sample Taker Introductory and Update Training sessions are arranged regularly throughout the year

For further details and reservations please contact Louise Bradley or Amanda Lugg

Birmingham Cytology Training Centre, Birmingham Women's Hospital, Birmingham, B15 2TG, Phone: 0121 627 2721, Fax: 0121 627 2624,

Email: Louise.Bradley@bwnft.nhs.uk or Amanda.Lugg@bwnft.nhs.uk Website: <http://www.bwnft.nhs.uk/professionals/cytology-training-centre>



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0114 226 8691

Nick.dudding@sth.nhs.uk

Website: www.cytologytraining.co.uk

Administration:

Mrs K Hawke

0113 246 6330

Kathryn.hawke@nhs.net

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BMS Histopathology Reporting

Designed for individuals undertaking training to report histopathology of either the female genital or GI tract.

The days have been put together with the support of those that have experienced the training for themselves and who successfully passed their first year OSPEs.

2nd / 3rd December 2015

Course Fee* : £120 per day or £200 for both days

HPV. Its role in cervical carcinogenesis and how to Detect it

A one day course that aims to give anyone involved in HPV testing an overview of basic cell biology, the role that HPV plays and the different techniques that can be used to detect it.

19th April 2016

Course Fee*: £95

Update Courses in Non-Gynae Cytology

A series of three one day courses covering serous fluids, urine, and respiratory cytology and ideal for anyone seeking an update in these areas, particularly those intending sit the IBMS diploma. Also includes an optional fourth half-day covering aspects of the IBMS exam.

26th – 29th April 2016

Course Fee*: £95 / £230 / £345

One-Day Introductory Non-Gynae Cytology Workshops

Ideal for anyone requiring an introduction to non-gynae cytology. These courses will cover specimen preparation and understanding the morphology of urine, respiratory, head & neck and effusion cytology.

Very useful to anyone undertaking their Specialist Portfolio.

Week commencing 9th May 2016

Course Fee*: £95 per day

One-Day Masterclass

Endobronchial ultrasound guided (EBUS) FNA

Aimed at scientists and pathologists who are embarking on starting an EBUS service with rapid on-site assessment, or existing practitioners who wish to update their knowledge

24th November 2015

Course Fee: * £95/ £120

**Participants from the North East, North West, Yorkshire and East Midlands will incur £15 administration fee per day on all courses above except those marked * where full fee applies. All prices are subject to change. Further information and application forms are available from our Administration Team:*

Kathryn.hawke@nhs.net



2016 COURSES

All course information and online booking form can be found on our website
www.lrctc.org.uk

Pre-Registration Gynaecological Courses

INTRODUCTORY COURSE IN GYNAECOLOGICAL CYTOLOGY (Thinprep®)

- 1st – 26th February
- 3rd – 28th October

Course fee:

- Contracted London regional students: No charge
- All other students: £1100

FOLLOW UP COURSE (Thinprep®)

- 11th April – 15th April
- 25th – 29th July

Course fee:

- Those who attended the Introductory Course at LRCTC: No charge
- Other participants: £400

PRE – EXAM COURSE (Thinprep®)

- 4th – 8th January
- 18th – 23rd September

Course fee:

- Contracted London regional students: Free
- Non-Contracted students: £400

Medical Practitioners Courses

PATHOLOGISTS COURSE – GYNAE

This two day course covers gynaecological cytology.

- 2nd – 3rd + 4th (Optional Mock Exam) March

Course fee: - £200 Mock exam - +£50

PATHOLOGISTS COURSE – NON GYNAE

This four day course covers non-gynaecological cytology.

- 14th – 17th + 18th (Optional Mock Exam) March
- 12th – 15th + 16th (Optional Mock Exam) September

Course fee: - £ 400 Mock exam - +£50

Please indicate on the online booking form if you wish to attend the mock exam.

MEDIC'S 1-DAY UPDATE COURSE

A refresher course for consultant pathologists/AP's

- 20th May
- 28th September

Course fee

- Contracted London regional participants: Free
- Non-Contracted participants: £150

Post Registration Courses

BMS/CYTOSCREENER UPDATE COURSE

- 12th – 14th January
- 9th – 11th March
- 20th – 22nd April
- 17th – 19th May
- 6th – 8th June
- 31st August – 2nd September
- 22nd – 24th November
- 7th – 9th December

Course fee:

- Contracted London regional participants: Free
- Non-Contracted participants: £350

Introductory Non-Gynae Courses

RESPIRATORY CYTOLOGY COURSE

- 13th – 14th June

SEROUS FLUID CYTOLOGY COURSE

- 8th – 9th September

URINE CYTOLOGY COURSE

- 29th – 30th November

Course Fees

- Contracted London regional participants: Free
- Non-Contracted participants: £200

Medical Laboratory Aides (MLA's) Courses

INTRODUCTORY MLA COURSE

This is an Introductory course designed to cover topics such as overview of the NHSCSP, terminology, role of an MLA and audit.

- 25th April
- 16th November

Course Fee

- Contracted London regional participants: Free
- Non-Contracted participants: £150

Book online at www.lrctc.org.uk

All courses above are CME, IBMS CPD and NAC CEC accredited.

Further details/information can be obtained by contacting 0208 869 5270 or emailing nwlh-tr.lrctcbooking@nhs.net or by visiting our website.



Scottish Cytology Training School

Programme 2015/16/17

No course fee is charged for Gynae
cytology courses to employees of
Scottish NHS Trusts

Training School Director

Sue Mehew

Tel: 0131 242 7149

Email: sue.mehew@nhslothian.scot.nhs.uk

Training School Manager

Fiona McQueen

Tel: 0131 242 7149

Email: fiona.mcqueen@nhslothian.scot.nhs.uk

Training School Administrator

Training School Administrator
Pathology Department
Royal Infirmary of Edinburgh
51 Little France Crescent
Edinburgh EH16 4SA

Tel: 0131 242 7135

Email: scts@nhslothian.scot.nhs.uk

Application forms available on request from:

scts@nhslothian.scot.nhs.uk

NHSCSP Accredited Training Centre

**Courses held at
The Bioquarter, Royal Infirmary of Edinburgh,
1st Floor, Building 9, Edinburgh Bioquarter,
9 Little France Road, Edinburgh. EH16 4UX**

unless states (SGH) Southern General Hospital,
Glasgow.

*Non-NHS Labs – price on application
All courses are Liquid Based Cytology (ThinPrep)
Courses are CPD accredited*



Introductory Course

22nd February – 18th March 2016
5th September – 30th September 2016
22nd February – 18th March 2017
£1000

Introductory Course Part 2

16th November – 20th November 2015
21st November – 25th November 2016

Update Course

4th – 5th November 2015 (SGH)
1st – 2nd December 2015
1st – 2nd February 2016
19th – 20th April 2016
8th – 9th June 2016 (SGH)
7th – 8th December 2016
1st – 2nd February 2017

£100 per day

Pre-Exam Course

22nd – 24th Aug 2016 (for Oct Exam)
£250

Workshops – BMS Medical/Consultant Staff

26th November 2015
29th November 2016 *tbc*
£100

ST1 Introduction to Cervical Cytology

28th Sept – 2nd October 2015
5 – 9th September 2016 *tbc*

Non-Gynae Courses - for Trainee Medical (ST3) & BMS staff

20th – 21st September 2016 *tbc*

£100 per day

Course for Colposcopists

13th – 14th January 2016 *tbc*
11th – 12th May 2016 *tbc*

£100 per day

2015/2016 Course Schedule

Date	Gynae Courses	Fee*
13 June – 8 July 2016	Introductory in Gynae Cytology	NHS £1000 Other £1200
1-3 December 2015 8-10 March 2016 7-9 June 2016 13-15 September 2016 6-8 December 2016	Update in Cervical Cytology for Technical Staff	NHS £300 Other £350
8 December 2015 18 May 2016 8 November 2016	Update for Cytology Checkers	£100
11 November 2015 19 April 2016 18 October 2016	Update in Cervical Cytology for Pathologists & Consultant BMS's & Holders of the Advanced Specialist Diploma in Cervical Cytology	£100
27 April 2016	Cervical Histology for Technical Staff	£100
3-4 November 2015 12-13 April 2016	Gynae Pathology for Trainee Colposcopists	£200
18-19 January 2016 9-10 May 2016 19-20 September 2016	Cervical Sample Taker Training	£250
18 November 2015 21 January 2016 12 May 2016 22 September 2016	½ Day Update in Cervical Screening for Sample Takers	

Date	Non-Gynae Courses	Fee*
23 February 2016	Serous Fluid Cytology	£100
2 March 2016	Respiratory Cytology	£100
20 October 2015 11 October 2016	FNA Cytology	£100
24 November 2015 15 November 2016	Urinary Tract Cytology	£100
15-18 March 2016 6-9 September 2016	Non-Gynae for Trainee Pathologists	£400

*PLEASE NOTE THAT NO FEE IS APPLICABLE FOR NHS STAFF BASED IN THE SOUTH WEST REGION

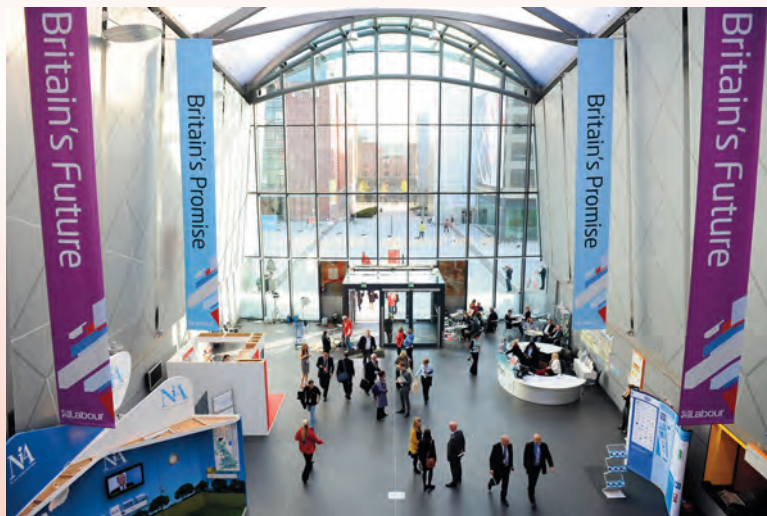
South West Regional Cytology Training Centre

Southmead Hospital
Department of Cellular Pathology
Lime Walk Building
Bristol BS10 5NB

Tel: 0117 323 5649
Fax: 0117 323 5640
Email: SWRCTC@nbt.nhs.uk

www.cytology-training.co.uk

European Congress of Cytology (ECC)



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Material for publication should be sent direct to the Editor; all other correspondence with the Association should be addressed to the Secretary.

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www.britishcytology.org.uk

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