

From the President – *Tony Reilly*

Welcome to the final edition of the Tissue paper for 2011. It has been a very successful year for the HGQ and the Histology community generally. We have had 2 well attended Scientific meetings at S&N and the PAH with the third planned to coincide with the AGM on the 9th December hosted by QML. My sources inform me that David Gan will not be speaking which is very unusual for a QML meeting. We also held a well attended social event in the form of a wine tour and I feel that independent social gatherings could become an annual event.

As well this year there was a well organised National Meeting hosted by the NSW group. Following this conference representatives from all states met for a debrief on the conference and to discuss future planning for Histology at a national level. As per the current roster the next National Meeting will be hosted by the Victorian Histology Group. Over a number of years there has been a lot of discourse between the various state groups and Histologists from Western Australia about developing their own special interest group and as a result they have held a number of informal scientific meetings in 2011. With expected continued growth they will be hosting the following National Meeting in Perth in 2015. This is a good outcome for Histology in WA and has come about due to increased communication between the states which commenced at the first National Meeting in Sydney in 2004. As yet there are no plans to create a National body because the current system of regular communication between the states is working very well and servicing both local and national needs. Who knows what lies ahead but I do not see this changing in the near future.

The AGM is being held at the Norman Hotel on the 9th December in conjunction with the scientific meeting and the Christmas party. For fully paid members the HGQ will cover the main meal and drinks for a few hours. If you have not paid membership this year you can pay your \$25 for full benefits on the night however the membership will expire on 31st December 2011. Memberships for 2012 will be due in January. I look forward to seeing you all at the AGM. From the committee of the HGQ we wish all of our members a safe and healthy Christmas and New Year period.

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- For safety the hand wheel may be locked in any position
- Waste receptacle containing debris is easily dismantled and cleaned
- Microtome has a safety alarm

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Secretarial Report – Jerres Alcober



What a year it's been for the Histotechnology Group of Queensland. 2012 has seen numerous conferences, scientific & committee meetings and social events including extensive planning for the upcoming state conference.

The 2nd scientific meeting for the year was held at

Pathology Queensland's Princess Alexandra Hospital Laboratory on Thu 27th Oct 2011. The speakers included Mr. Tony Reilly (RCPA QAP Technical Assessment) & Mr. Steve Riley (Disseminated Mycobacterial Infections: A review of interesting case studies). A big thank you for their contribution to this meeting. There was a great turn out featuring guests from laboratories from across the South-East corner.

Next up, is the 3rd & last scientific meeting for the year. This meeting will be in conjunction with the AGM. The AGM will be hosted by Queensland Medical Laboratories and will be held at the Norman Hotel on Fri 9th Dec 2011. We are delighted to have Dr. Jason Stone & Dr. Brett Stone guest speaking for current, new & prospective members on the night. For more details on this event please log on to "www.hgq.org.au".

Just recently, the 2011 National Histotechnology Conference was held on Fri 4th – 6th November 2011 at the Rosehill Gardens Event Centre at Rosehill, NSW. The Histotechnology Group of NSW put together a very successful and well organised event. The group deserves all the accolades received so far.

The HGQ executive committee is well on schedule with 6 months until the 2012 State Histotechnology Conference on Fri 4th – 6th May at the Sofitel Hotel - Broadbeach, Gold Coast. Registration, Accommodation & Program details have now been released. For more information and updates, go to our official website.

As 2012 approaches, next year's events calendar will be finalized shortly. The annual winery tour will occur again in light of the success of this event earlier this

year. Many good suggestions have been put to the table and I can confidently say that 2012 will be an exciting one for financial members. Membership for 2011 is approaching the 100 financial member mark, which is a great achievement for the HGQ. We would love to welcome back 2011 members and prospective members for the 2012 membership period. With the state conference looming, it is expected that membership will experience further growth.

Just a reminder, that membership covers the calendar year: 1st January – 31st December. Membership fees are as follows - Full: \$25; Student: \$10. Being a financial member includes "Tissue Paper" subscriptions; website access; social event and state conference registration discounts; eligibility to vote; beverages & dinner covered at AGM. Renewals and new memberships can be completed online. For more details on membership, check out www.hgq.org.au

I would like to take this opportunity once again to thank everyone for reading the "Tissue Paper" and to all that contribute to its success.

Have a safe festive season. See you in 2012. Enjoy!!

Editor's Note - Anthony Van Zwieten

Thanks to everyone associated with the HGQ for your support over the last year. I have thoroughly enjoyed being the editor of the newsletter.

Thanks also to the contributors to this and previous 2011 editions. It is hoped that the financial reward on offer will encourage participation in submitting to the Tissue Paper. As you will read from this "bumper" Christmas edition, there is a wide range of contribution styles, from a conference report, to a narrative on working experience and a review on a medical technique not seen in the histology lab.

It was great to see a strong HGQ contingent in Sydney last month, and a thank you to Jay for providing the Jockey attire for the themed dinner ☺ Hope to see everyone at this Friday's AGM @ The Norman Hotel.



Uses of *In Vivo* and *Ex Vivo* Dermoscopy

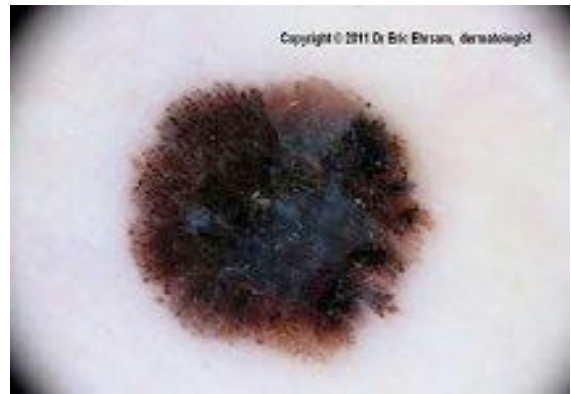
Andre Heiser - *My Lab Pathology*

Introduction

The increase in melanomas over recent years has highlighted the need for early detection methods. Dermoscopy is used in the clinical setting to examine lesions prior to removal with the aim of reducing the number of unnecessary excisions. Compared to naked-eye examinations, deromscopy has much improved sensitivity and specificity. However, if the laboratory is not notified of a possible melanoma diagnosis, there is a chance that a malignant lesion may be missed due to inadequate sampling using histological techniques. Dermoscopy is showing a number of advantages in the laboratory by highlighting areas of interest within a lesion for closer attention.

The Dermoscope

Modern dermoscopes use polarised light to illuminate the skin. Reflection from the skin surface is removed using a cross-polarisation filter and the skin surface is examined using the de-polarised light. Such dermoscopes are small enough to be hand-held and are simple to use. Previously, dermoscopes used an immersion fluid to remove unwanted light. The use of polarised light allows faster and less-tedious examinations of skin in both a clinical and laboratory setting.



Examining The Results

The dermoscopic images can be examined using a number of methods such as the ABCDE rule, 7-Point Scale and the standard pattern analysis.

ABCD(E) Rule:

- Assymetry
- **B**order irregularity
- **C**olour variation
- Large **D**iameter
- **E**volution

Glasgow Seven-Point Scale:

1. Change in size
2. Change in shape
3. Change in colour
4. Inflammation
5. Crusting and bleeding
6. Sensory change
7. Diameter more than 7 mm (0.28 in.)

Why Do We Need It?

Over recent decades, the morbidity and mortality of melanoma has increased with the highest rates in Queensland (42.89 and 55.8 new cases per 100,000 for women and men respectively). This seems to be largely due to a combination of increased detection and increased rates of melanoma. Early detection is essential as there is a correlation between tumour thickness and survival rates.

There is, at present, no effective treatment for advanced melanomas—early removal is essential and any technique which facilitates this should be welcomed. Dermoscopy can improve sensitivity by up to 30% but its effect on excision rates is still debated.

In Vivo Uses Of Dermoscopy

One way to measure the effectiveness of dermoscopy in the clinical setting is to ask if it is reducing unnecessary excisions while increasing necessary ones.

According to the Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand, there is a definite increase in the specificity and sensitivity when using a dermoscope instead of naked-eye examination.

Test	Sensitivity	Specificity
Naked-Eye Examination:	0.71	0.81
Dermoscopic Examination:	09.0	0.90

However, these results may not be reflected in the excision rates. Bafounta argues that there is little evidence at present that dermoscopy increases the number of early melanomas excised and/or decreases the number of non-melanomas not excised. Bafounta concluded that while dermoscopy can increase the accuracy of a clinical diagnosis, it does little to alter the rates of excisions.

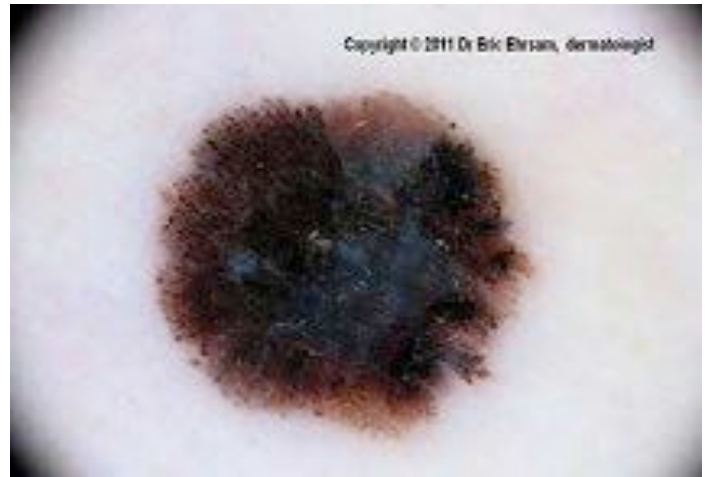
Carli, on the other hand, argues that it *is* improving the ratios of malignant/benign excision and that this ratio is improving over time. However, Carli does admit that the risk of a false negative is still significant as it would leave a melanoma in place.

Both sides agree that training is essential to use dermoscopy effectively.

While clinical examination using dermoscopy is better than clinical examination without dermoscopy, this may not yet be reflected in the excision rates of lesions and the risk of false negatives (leaving a melanoma in place) is still of concern. For dermoscopy to be seen as effective in the clinical setting (reflected in the excision rates), more studies are needed.

One of the definite advantages to using dermoscopy in the clinical setting (*in vivo* dermoscopy) is to monitor lesions over time. Digital dermoscopy, with its associated ability to easily store and access images, is especially useful for the “Evolution” criterion of the ABCDE checklist. Skvara found that dermoscopy was of little use for early and featureless melanomas unless follow-up dermoscopy was used to monitor the lesions over time (evolving lesions).

The effect of dermoscopy on skin excision rates is still being debated although the more recent evidence suggests it is starting to have a positive effect.



Top: Macroscopic evaluation of clinically non-suspicious lesion (Left), later diagnosed as a superficial spreading melanoma by dermoscopy (Right) and subsequent histopathology.

Bottom: Non-suspicious lesion on leg of patient (Left) diagnosed as basal cell carcinoma by dermoscopy (Right) and subsequent histopathology.

Ex Vivo Uses Of Dermoscopy

While *in vivo* dermoscopy may reduce false positives and negatives in terms of excisions, there are a number of advantages to using *ex vivo* dermoscopy at the laboratory end of melanoma diagnosis:

The gold standard for final diagnosis is still histological examination but this assumes that most of the tissue or, at least, a representative sample of the tissue is examined. This oversight is especially likely if the clinician does not indicate a suspected melanoma diagnosis.

Sections from a typical skin specimen are not as representative as many believe and unless thorough sectioning is done, only a small fraction of the tissue will be sampled (less than 2% according to Dyson). Melanoma can also be overlooked if it is associated with a pre-existing naevus.

Bauer cited three examples of melanoma which could have been missed if the most relevant areas not been examined. One of the case studies was a genuine example of a misdiagnosis due to a sampling bias combined with a lack of clinical information. The sampled tissue showed a clark naevus whereas retrospective examination revealed a superficial spreading melanoma.

The other two case studies were chosen as typical examples of the potential for this sort of error (where a melanoma is hidden inside a pre-existing lesion). Had the histologist sampled the wrong parts of the tissue, a melanoma diagnosis would have been missed and the lesion interpreted as a compound naevus or a clark naevus.

Using dermoscopy allows the third dimension (the surface of the skin) to be examined prior to tissue sampling—a dimension largely ignored by histological techniques. This is especially useful for difficult diagnoses as the clinician can indicate areas of greatest diagnostic relevance.

Ex vivo dermoscopy can be used to better examine tissue once it reaches the laboratory and reduce the chances that an area of diagnostic significance could be missed.

Advantages Of *In Vivo* and *Ex Vivo* Dermoscopy

There are four advantages to these approaches:

- 1) The clinician can warn the laboratory of a suspected melanoma diagnosis.
- 2) The areas of suspicion can be indicated on the specimen or request form.
- 3) The laboratory can examine the tissue prior to sampling to find the areas of diagnostic significance.
- 4) Unnecessary sectioning can be avoided by sampling the relevant areas immediately.

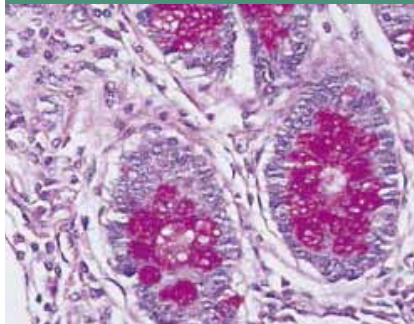
Conclusion

While *in vivo* dermoscopy in the clinical setting may appear to be effective in reducing the number of unnecessary excisions and increasing the number of necessary excisions, it is not the only use for dermoscopy. Dermoscopy can be used in the laboratory setting to examine lesions and determine the best areas of tissue to sample. Without this, there is a chance that pre-existing lesions could contain an undetected melanoma.

For references please contact the editor Anthony_van_zwieten@health.qld.gov.au

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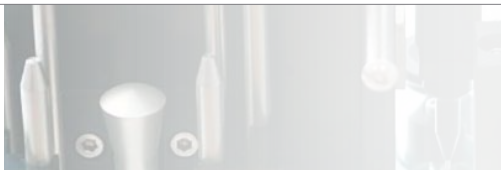
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Horses for Courses

National Histotechnology Conference Report

Lydia Kalpakos - *The Prince Charles Laboratory Group*

On the 4th – 6th of November 2011, the Histotechnology Group of NSW hosted the Fifth National Histotechnology Conference at Rosehill Gardens in Parramatta, Sydney. This was a particularly significant occasion for the members of the group, as they were also celebrating their 30th year of operation. The conference was held at the award winning Event Centre and the very appropriate “Horse Racing” theme complemented the venue and also the important time of year on the horse racing calendar!

The conference commenced with the workshops on Friday which involved over 150 delegates. The workshop topics included surgical dissection, histochemistry and histo hypotheticals. Then, during the course of the weekend, 14 guest speakers delivered their presentations, including international speaker, René Buesa.

Mr Buesa is a retired histology manager from Cuba who has published numerous articles on laboratory safety and workload. During his first presentation on the xylene free histology laboratory, Mr Buesa discussed various xylene substitutes that he has worked with over the years which can be utilised as clearing agents, dewaxing solutions and for general cleaning. The final goal being to completely eliminate the use of xylene in the laboratory and thus eliminate the hazards associated with it. For tissue processing, Mr Buesa suggests using mixtures of isopropanol and mineral oil, followed by undiluted mineral oil, as clearing agents. For dewaxing sections, an aqueous solution of dishwashing liquid should do the trick. And for cleaning tissue processors, microtomes, moulds, etc., look no further than laboratory strength glassware cleaner. Needless to say, some of the ideas proposed by Mr Buesa triggered a few whispers amongst the histotechnologists in the audience! If you're interested in reading Mr Buesa's journal article, “Histology without xylene”, email me at lydia_mcphee@health.qld.gov.au.

Mr Buesa's second presentation on Sunday was on productivity in the histology laboratory. Prior to attending the conference, Mr Buesa requested that one staff member from each lab fills out a productivity questionnaire. Based on the feedback he was given, he was then able to compare each of the labs in terms of workload, productivity and staff member workloads. He then compared the productivity of Australian labs with other labs across the world. In summary, apparently some of our labs are overstaffed and therefore should be able to produce a higher work output with fewer staff! Mmmm... Again, feel free to email me if you would like to read Mr Buesa's articles on “Productivity standards for histology laboratories” and “Staffing benchmarks for histology laboratories”.



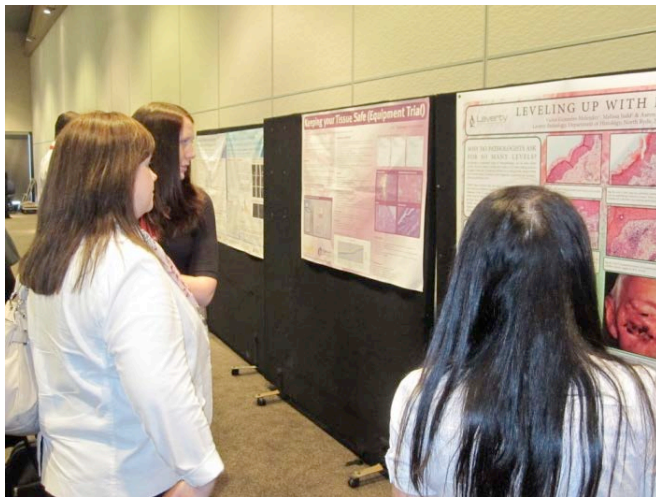
Dr Susan Branford from the Department of Molecular Pathology in Adelaide gave a very interesting presentation on molecular pathology for patients with chronic myeloid leukaemia. Dr Branford demonstrated how increasingly important molecular studies are becoming in both clinical and research laboratories and how molecular testing plays a significant role in aiding clinicians in the diagnosis and management of their patients. If anyone ever has the opportunity to hear Dr Branford speak in the future, I highly recommend they attend. She was an excellent presenter and I think her talk was very well received amongst the attendees.

Another interesting session was the discussion panel on bone pathology case studies. Drs Fiona Maclean, Julie Schatz and Richard Boyle, who work together as a multi-disciplinary team at the Royal Prince Alfred Hospital (RPAH) in Sydney, gave a joint presentation (pardon the pun!). Dr Maclean is an anatomical pathologist based at Douglass Hanly Moir Pathology, Dr Schatz a musculoskeletal radiologist at RPAH and Dr Boyle an orthopaedic surgeon at RPAH. And yes, some of you may have recognised Dr Boyle from the TV series, RPA. Each medical specialist outlined the role they play in diagnosing various orthopaedic conditions and the presentation was very well supported by a variety of macroscopic and microscopic images.

Penny Whippy and Bill Sinai also gave a joint presentation, discussing their recent involvement in the SPHERE program. This multi-country program is aimed at improving the detection and interpretation of Her-2 expression in breast and gastric cancers. Penny and Bill were responsible for preparing training material and presenting that material to delegates from nine countries in the Asian region, including running dry and wet workshops in Korea and Thailand.

Other topics over the course of the weekend included acid-fast staining, basal cell carcinomas, Mohs surgery and the role of nanotechnology in immunocytochemistry and cell biology. And while I'm sure not every topic appealed to all the delegates, I think the one thing I can safely say is that everyone enjoyed obtaining as many freebies (samples and choccies!) as possible from the trade show. As always, the usual suspects made an appearance. These included the sponsors, Leica, Dako, Siemens and Roche, and the rest of the trade including HD Scientific, Olympus, Thermo Fisher and Pangalark to name a few. There were also some fantastic prizes to be won, including an ipad 2, courtesy of Siemens, and the \$50 Coles Myer gift card that I won (thanks Thermo)!

And speaking of prizes, there were also great prizes awarded to the winners of the poster competition. Congratulations to our Supervising Scientist at The Prince Charles Hospital, David Butler, for winning third prize for his poster on the Milestone Tissue SAFE.



Of course, the highlight of the weekend for many would have been the dinner on Saturday night which again followed the horse racing theme. I think everyone had a lot of fun (especially those on the dance floor!) and it was great to see so many people coming out of their shells. To add to the fun on the night, prizes were given to the best dressed male and female on the night. While most delegates conformed to a more conventional style of dress, there was one boisterous young group of jockeys from Queensland who stole the show! Not surprisingly, our fellow histologist wearing the pink jockey costume won Best Dressed Male of the night.

Overall, the conference seemed to be quite a success. It was great to meet some of the organisers and put faces to names. Hopefully we will see some of our newly acquired friends at our state conference next year!

Fashions on the Field - HGQ members at the NHC 2011





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It's Just a Pigment of your Imagination

David Gan -QML

There have been some questions recently about pigments and how they affect us in histology, particularly immunohistochemistry staining. I thought that it was time to reacquaint ourselves a little with our ancient nemesis.

Pigments in Histology are usually grouped into three categories.

- Endogenous pigments which are produced within the body, such as melanin and calcium.
- Exogenous pigments which enter the body accidentally, such as carbon and asbestos.
- Artefact pigments which are produced from chemical substances reacting with the tissue, such as formalin or mercury pigment.

These classifications are not precise, but are helpful to Histology. A few pigments may be seen in more than one group, such as iron which can be found endogenously in the liver, or exogenously, as shrapnel wounds (often found in laboratory managers!)

The identification of pigments can be quite useful in assisting with histological diagnosis. The presence of bile in a liver tumour can be suggestive of Hepatocellular Carcinoma. The presence of melanin pigment in a poorly differentiated tumour could point towards a melanotic lesion.

Pigments can also hinder diagnosis such as excessive melanin pigment in a lesion masking cell morphology, or formalin pigment mimicking melanin, creating unnecessary concern.

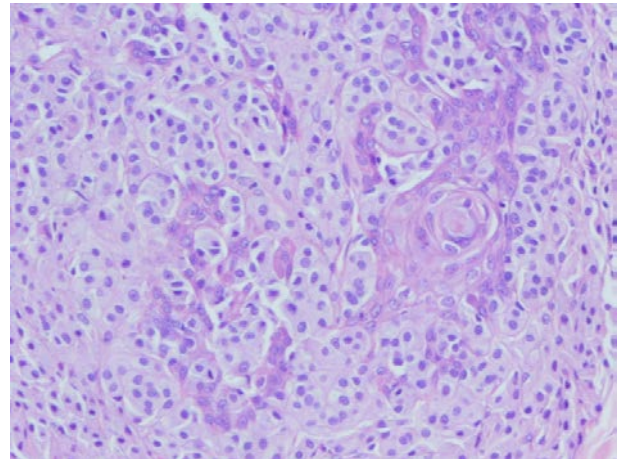
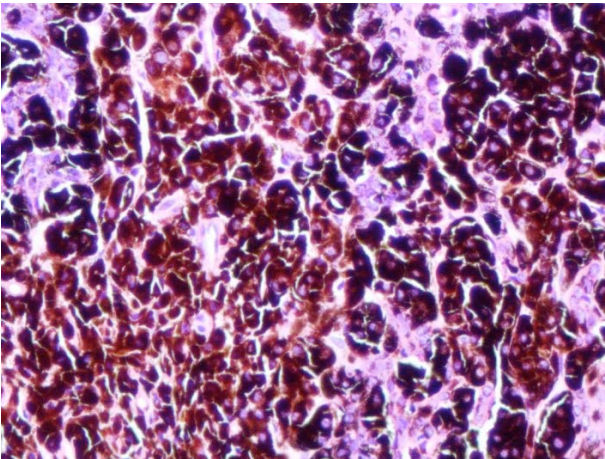
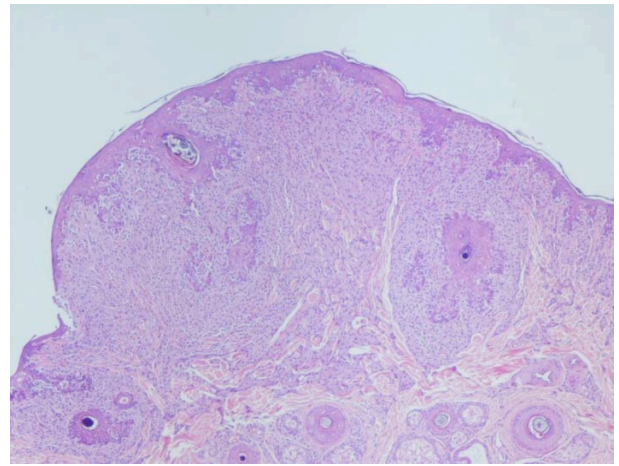
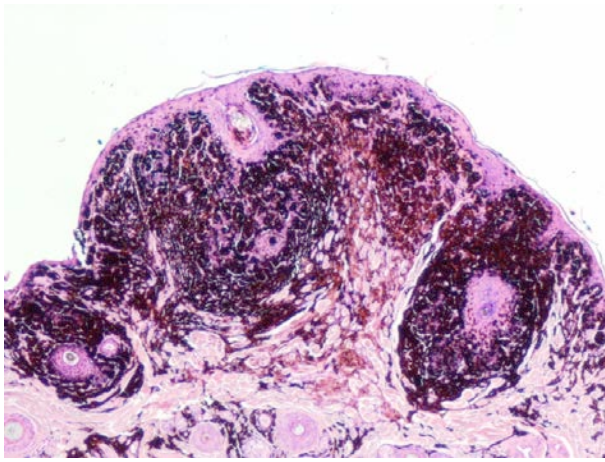
There is a common problem (especially in Queensland) when performing immunohistochemistry (IHC) on sections containing melanin pigment. The most common chromogen used in IHC is Diaminobenzidine (DAB) which can look much like melanin pigment. This can make it difficult to distinguish true staining from pigment. In my experience, bleaching the melanin out before IHC staining often leads to problems. The sections may lift off the slide during the staining protocol and often the staining is weaker and/or patchier. The easiest solution for this is to use a different colour chromogen. Most automated platforms have a different colour chromogen available, usually red. Given all of these factors, it is still important to be able to identify various pigments and, if necessary, bleach them out of the sections.

With advances in Histology, pigment identification is becoming a "dyeing" art. Perls Prussian Blue stains are still common, but very few histologists could recognise formalin pigment, let alone mercury pigment.

On the following page, note the example of a benign dermal melanocytic lesion in a canine.

Left Top and Bottom: Low and High power images of lesion

Right Top and Bottom: Low and High power images of lesions post-melanin bleach



To learn a little more about pigments, I thought that a practical staining exercise might be interesting and a little fun. I have four cases with various pigments in each to identify. Two of the cases will come with unstained slides, the other two just an H&E. So have a go yourself or get a team together and order some slides. All results will be confidential so give it a go, you have nothing to lose and you may learn something in the process. If you would like some slides please call me on (07) 3121 4018 and I will send some out, get in quick because there are limited slides.

References:
Bancroft & Gamble. 6th ed.

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Working amongst the dead – When their day ends, my day begins

Sharon Pyyvaara - *The Prince Charles Laboratory Group*

Few people consider working in a mortuary a first class career choice. However what I didn't realise when I first entered this career path, is that it is one of the most rewarding and interesting jobs you can do, especially when discovering answers during an Autopsy.

Morgue is derived from the French which means "to look at solemnly"; in a hospital environment it is used for the storage of deceased awaiting removal for burial or awaiting a non coronial Autopsy. The term Mortuary is more commonly used, and is always discretely located so that patients and public don't see deceased bodies being removed or delivered to the mortuary for storage and collection.

Our Mortuary consists of an office and storage area, change room, autopsy theatre, viewing room and a refrigerator area.

Mortuaries can contain two types of refrigerating systems and the most commonly used in a hospital environment is a positive temperature, where bodies are kept between 3 degrees - 4 degrees. This is used to keep the bodies for several weeks; and slows down the rate of decomposition but does not prevent decomposition. A negative temperature allows the bodies to be kept between -10 degrees and -50 degrees and is used in forensic institutes especially for cases that have not been closed or for unidentified bodies. This allows the bodies to be completely frozen and decomposition is greatly reduced.

As a Mortuary assistant one of the many duties done first thing and throughout the day is to record and check temperatures of the cold room and report immediately if any faults are occurring.

When a deceased arrives at the mortuary there are many responsibilities that require the upmost attention to avoid mistakes which can be disastrous. It is essential that the mortuary assistant views the body and checks all identification tags and valuables against the shroud slip and records all this information including the tray number into the mortuary register book. Once the body has been registered we can contact the ward in which the deceased came from and retrieve the Cause of Death Certificate which is given to the funeral home who is authorised by the family to retrieve the deceased.

Some cases are not always straight forward and may require a Coroner's approval before a Cause of Death Certificate can be given. The Coroner will investigate the circumstances surrounding the death and will then advise the medical staff of his findings and what actions need to be followed.



If an Autopsy is required there are many legal forms that must be completed before an autopsy can begin. So it is the mortuary assistant's duty to submit all legal forms and patient records to the supervising Pathologist to review the case for any potential risks or whether it may fall under a Coronial case.

Once an Autopsy has been approved the mortuary assistant will register the case and set up the mortuary theatre with all the equipment needed for the autopsy. As the title suggests during an autopsy it is their duty at all times to assist the pathologist with evisceration and at all times maintaining a clean and safe working environment.

For a Diener (Leichendiener is German for- corpse servant) more commonly known as mortuary assistant, kindness, respect and compassion is a must for the deceased and their families. Mortuary assistants have many duties to attend to daily and an area that requires the utmost respect and compassion is deceased viewings.

Viewings can play an important role in the grieving process and it is the mortuary assistant's duty to present the bereaved family with their loved one in a relaxed position and environment. The first and most important process of a viewing is checking the identification tag on the deceased and making sure it is the same person required for a viewing.

The second most important duty is preparing the deceased for viewing and this entails laying them on a bed with the help of a ward nurse who also identifies the deceased. We place blankets on the deceased, a pillow under their head to make them look at ease, brush their hair and finalise any other religious or cultural requirements that the family has requested.

Another area that requires complete compassion is the everyday phone calls we receive from bereaved families of the deceased. It is the mortuary assistant's duty to take the time to reassure the family that their concerns are important and will be passed on to the social worker, and they will be contacted immediately regarding their concerns.

Memories of my first experience of assisting with an autopsy were the array of emotions, from fear of the unknown to inquisitiveness of what actually happens. As I was shown the change room where I had to put on my scrubs I was overwhelmed by how many sizes there were and you guessed it I put on the biggest size there was.

Then came all the protective gear and as I put my three layers of gloves on I realised I could not tie up my apron, my mask, or my head gear, don't worry I have it down pat now but at the time I thought what have I got myself into with a little chuckle. I soon realised this was not the only challenge I had coming I still had to perform an autopsy.

As a mortuary assistant we have many highly responsible duties and procedures that must be upheld with compassion and respect.

I truly find autopsies an area where unexpected things can appear and various situations may arise and it takes total concentration and a strong stomach to be a mortuary assistant, but I wouldn't be caught DEAD doing anything else.



Thanks to Sue Bell – Quality Co-ordinator for Anatomical Pathology, Pathology Queensland and HGQ Committee Member for passing this on:

AFIP Closure ‘Major Loss’ to Pathology Community

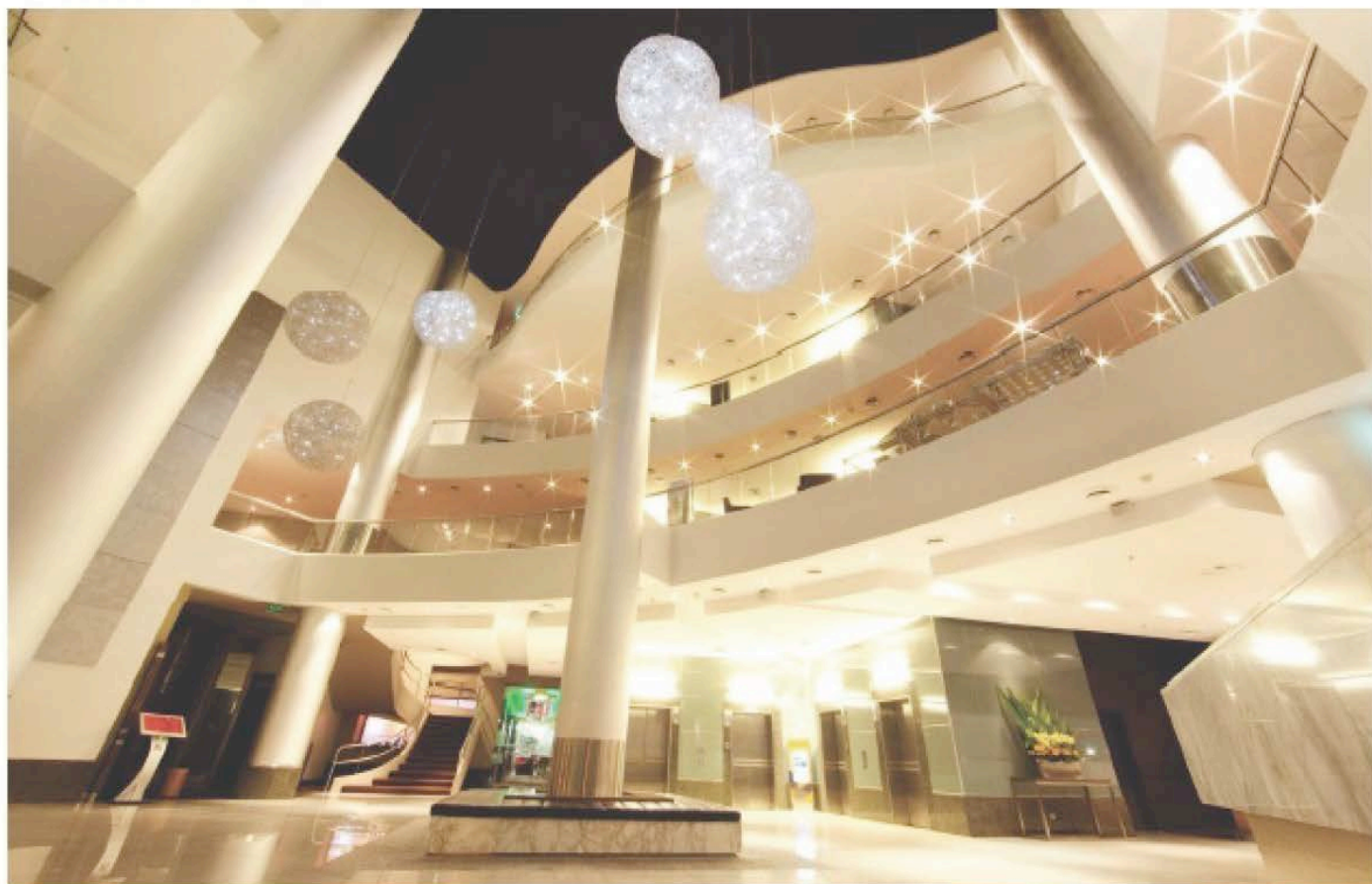
ASCP President John E. Tomaszewski, MD, FASCP, laments next month’s closing of the world’s oldest and most-respected pathology institute in the world, calling it a “major loss.” Slated to close its doors for good on Sept. 15, 2011, the Washington, D.C.-based Armed Forces Institute of Pathology (AFIP) has been a global resource for disease diagnosis and analysis for nearly 150 years. With some 95 million tissue samples in its repository, AFIP’s breadth of resources and renowned scientific consultants have been a lifeline to pathologists in the United States and those working in remote or under-resourced areas.

“If the free or low-cost referral services, pathology training courses, and access to years of historical case studies are no longer available to nongovernment scientists, it will be an incalculable loss to the pathology community and will certainly impact progress in global health,” Dr. Tomaszewski said.

An Aug. 18, 2011, *Nature* article, “Death of a Pathology Centre: Shelved,” notes that the Joint Pathology Center (JPC) was established to carry on the AFIP’s military duties, including consulting on pathology cases for the military and other federal agencies. The article also reports that the fate of the tissue repository, which is now under the control of the JPC, remains unknown. It has been moved to two renovated buildings at Forest Glen Annex, one of which used to serve as the laundry facility for the AFIP and the Walter Reed Army Medical Center. Officials have asked the Institute of Medicine to recommend how best to use the repository, including who should have access to it, JPC’s interim director Colonel Thomas Baker said in the *Nature* article. Those recommendations are due in June 2012.

AFIP’s closure is a result of the 2005 Base Realignment and Closure, a cost-cutting initiative to close Walter Reed Army Medical Center and consolidate three hospitals at a nearby Bethesda, Md., naval center.

In 2008, Congress mandated that the JPC be established to handle some of the Institute’s roles. The JPC began accepting cases in April of this year and, according to its website, “provides world class diagnostic subspecialty pathology consultation, education and research services to federal agencies and operates the National Pathology Tissue Repository in support of the mission of the Department of Defense and other federal agencies.”



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