

QML PATHOLOGY

newsletter December 2010

>> Benign Melanocytic Proliferations and Naevi Dr Inara Strungs, Dermatopathologist

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>> Benign Melanocytic Proliferations and Naevi

Dr Inara Strungs, Dermatopathologist

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Freckle (ephelis)

A **freckle (ephelis)** is an area of increased melanin production without an increase in melanocyte numbers. These will often fade in the absence of UV exposure.

Lentigo

In contrast, a **lentigo** shows an increase of melanocytes in linear array along the dermoepidermal junction and persists in the absence of UV exposure. Multiple lentigines are occasionally a component of the rare hereditary syndromes with internal manifestations such as Carney syndrome.

Labial Melanotic Macule

Labial melanotic macule is a pigmented macule occurring on the lip that histologically demonstrates increased melanin pigment, normal melanocyte numbers and melanin spillover into the dermis. Similar lesions may occur on the penis and vulva (**genital melanotic macules**). These lesions are benign, but tissue diagnosis is of importance to distinguish them from mucosal melanomas, which can demonstrate a deceptively banal clinical appearance.

Acquired Melanocytic Naevus

Acquired melanocytic naevi consist of aggregates of benign naevus cells. **Junctional naevi** consist of nests at the dermoepidermal junction, **compound naevi** also show dermal naevus cells and **intradermal naevi** involve the dermis only. Clinically distinctive variants include the **halo naevus**, which demonstrates a depigmented halo due to the initiation of inflammatory regression, and the **Meyerson naevus**, which shows an eczematous halo.

Spitz Naevus

Spitz naevus is a lesion occurring predominantly in children and adolescents, which, despite some histologic resemblance to malignant melanoma, behaves in a benign fashion. Clinically, Spitz naevi are usually pink, red or reddish brown papules or nodules that demonstrate rapid growth over 3 to 6 months and then may remain stable for years. The face and lower limbs are common sites.

Histologically, Spitz naevi are composed of plump epithelioid and/or spindle cells, and display symmetry, maturation and Kamino bodies (*Fig. 1*).

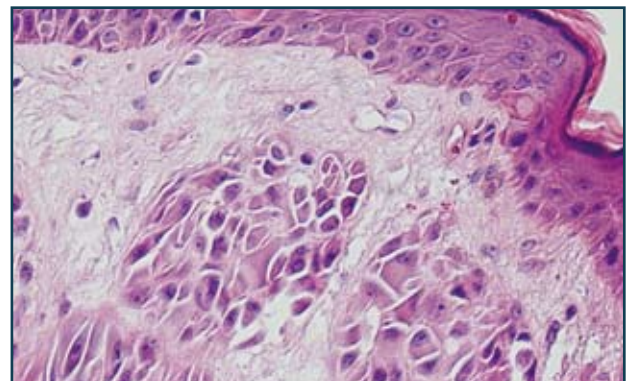


Fig. 1: Spitz naevus

Large dermal cells resembling melanoma.

Though there are criteria to distinguish Spitz naevi from melanoma, there are some lesions that show features at odds with the classical picture and are designated atypical Spitz naevi/atypical Spitz tumours and are considered to be of uncertain malignant potential. As with all Spitz naevi, they should be completely excised, with margins as for melanoma if sufficiently atypical, and followed up clinically. It is worth reiterating that melanomas may be misdiagnosed as Spitz naevi and vice versa, even by experts, and that some Spitz lesions defy accurate diagnosis by current methods.

Pigmented Spindle Cell Naevus

Pigmented spindle cell naevus (Reed naevus), which is no longer considered a variant of Spitz naevus, is a benign naevus that presents particularly on the thighs of young females as a darkly pigmented lesion.

Congenital Melanocytic Naevus

Congenital melanocytic naevi occur in 1% of all newborns, and **congenital naevus-like naevi/early-onset naevi** develop by the age of two years and may be even more common. Small (less than 1.5 cm) and medium-sized (between 1.5 and 19.9 cm) congenital naevi probably have a slightly increased risk of malignant degeneration when compared to acquired naevi, although the degree of the risk is controversial. Studies have shown a risk from 1 to 8%, with a recent review finding that it is 0.7%.

A rate of malignant degeneration of 5% has been estimated for giant (over 20 cm) congenital naevi and in one study 50% of melanomas occurred before puberty. The issues of surgical management and clinical follow-up, therefore, require early specialist consultation.

Dermal Dendritic Melanocytic Lesions

Dermal dendritic melanocytic lesions are derived from melanocytes whose embryonic migration from neural crest to epidermis has arrested in the dermis. The prototypic lesion is the **blue naevus**, its colour attributable to the site of pigment deep within the dermis. The **common blue naevus** is a small blue or blue-black macule or papule occurring at any site. The **cellular blue naevus** is a larger nodular lesion occurring particularly on the buttocks, extremities, scalp and dorsal aspects of the hands and feet. The **Mongolian spot** is the most common congenital dermal melanocytic lesion.

These lesions are all benign and the major pathologic issue that uncommonly arises is separation from the rare malignant blue naevus and blue naevus-like metastatic melanoma.

The **deep penetrating naevus** is regarded by some experts as a variant of blue naevus. It is heavily pigmented, usually occurs in young adults and may have histological features that overlap with Spitz naevus and melanoma.

Dysplastic Naevus

Dysplastic (or Clark's or atypical) naevi, found in 2-18% of the population, are larger than ordinary naevi (over 5 mm in diameter) and have irregular margins and variegated colour. They may be sporadic or familial, and are regarded as intermediate lesions of tumour progression between naevi and melanoma. Though dysplastic naevi are reported in contiguity with 1/3 or more of superficial spreading melanomas, most dysplastic naevi are stable and rarely progress to malignancy. They are a marker of increased risk of melanoma.

Dysplastic naevi have distinctive histology, though it must be noted that not all clinically atypical naevi show these features. The histology comprises random cytological atypia, architectural atypia with lentiginous hyperplasia, and a stromal response (Fig. 2).

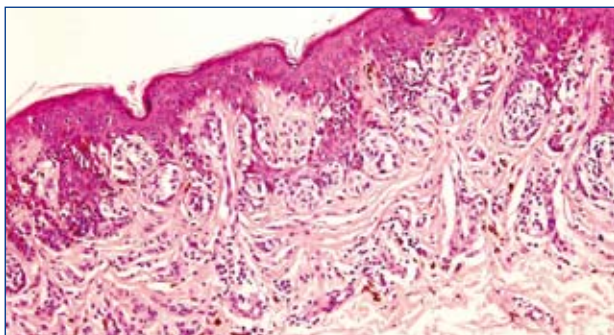


Fig. 2: Dysplastic naevus

Random cytological atypia; variation in size, shape and placement of nests of naevus cells; fibrosis and inflammation of stroma.

Most pathologists grade the atypia into mild, moderate and severe and, while the interobserver concordance may be

low, a study has shown an increasing probability of a personal history of melanoma with increasing grade (Arumi-Uria et al).

Dysplastic naevi should be excised if they are clinically suspicious. There is no place for removal of all naevi in dysplastic naevus syndrome. Partial biopsy is not recommended since 1/3 of dysplastic naevi are heterogeneous in their atypia. There is no general agreement about treatment of incompletely excised dysplastic naevi, but a survey of American dermatologists indicated that 2/3 would re-excise them. Crowson et al state that the treatment of incompletely or closely excised **mildly dysplastic naevi** should be re-excision only if there is a residual lesion clinically, and of **severely dysplastic naevi** should be a 5 mm margin. They are equivocal about **moderately dysplastic naevi** (which should probably be conservatively re-excised).

Lentiginous Dysplastic Naevus of the Elderly

This naevus (which some experts designate as 'lentiginous melanoma') occurs on the back in males and on the legs in females over 60. It is an important precursor, rather than marker, of melanoma and should be excised with a margin of 5 mm.

Other Atypical Naevi

Various other variants of melanocytic naevi may show atypia clinically or histologically that may be suspicious for melanoma. These include **naevi of special sites** (acral, genital, breast, ear, flexures, umbilicus and perianal region), **irritated naevi**, **regenerating naevi** (after incomplete excision or trauma), **naevi in pregnancy** (which may darken and show a slight increase in mitoses) and **cellular nodules in congenital naevi**. It is therefore important to provide clinical details since a degree of atypia is appropriate in some naevi and does not indicate malignancy.

References/Acknowledgements

1. Arumi-Uria M, McNutt NS, Finnerty B. Grading of atypia in nevi: correlation with melanoma risk. *Mod Pathol* 2003; 16: 764-71.
2. Crowson AN, Magro CM, Mihm MC Jr. *The Melanocytic Proliferations: A Comprehensive Textbook of Pigmented Lesions*. New York: Wiley-Liss, 2001.
3. Scolyer RA, McCarthy SW. *Pathological Diagnosis of Melanocytic Tumours: Clues and Pitfalls*. Keynote Lecture IAP Annual Scientific Meeting 2010.
4. Weedon D. *Weedon's Skin Pathology*. 3rd ed. Churchill Livingstone Elsevier, 2009.
5. Acknowledgement: Based on article by Dr Rohan Mortimore, QML Pathology Skin Pack 2007.



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Infectious Diseases Report - Geographic Distribution - October 2010

ORGANISM	Regions (as per key below)															Total			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Oct	Sep	Aug	Jul
Adenovirus (not typed)		2	1						2	1	5		3	1		15	34	37	24
Adenovirus (typing pending)		1							1	1	4	1		2	1	11	19	24	13
Barmah Forest virus	1									1		1		2	4	9	10	16	8
Bordetella pertussis	8	20	12	1	1		29		31	4	34	25	13	2	10	190	296	310	260
Brucella species									1	1		1				3	5	7	1
Campylobacter jejuni																0	0	0	0
Chlamydia pneumoniae																0	0	0	0
Chlamydia trachomatis, not typed	38	50	14	6			47		18	18	94	30	7	22	4	348	729	744	724
Coxiella burnetii									1	1						2	7	11	13
Cryptococcus species							1		1							2	5	3	0
Cytomegalovirus (CMV)	6	1	3		1		4		3		9	6	1	1	2	37	78	52	65
Entamoeba histolytica																0	0	1	1
Enterovirus - not typed																0	2	2	1
Epstein-Barr virus (EBV)	1	8	3	1	1		21		5	3	15	7	5	4	3	77	134	107	111
Flavivirus unspecified	1						4					1		1		7	7	7	16
Hepatitis A virus			1								2					3	1	1	6
Hepatitis B virus	4	3	2	1	1	1	9		1		22	1	1	2	2	50	93	82	91
Hepatitis C virus	6	25	14	2			22		16	5	35	10	4	4	6	149	273	306	300
Hepatitis D virus																0	0	0	2
Hepatitis E virus							1									1	0	0	0
Herpes simplex Type 1	13	33	4	3	1		26		17	3	36	11	5	6	1	159	275	258	255
Herpes simplex Type 2	11	30	4	2			8		10	5	23	9	2	7	5	116	160	162	146
Herpes simplex virus - not typed																0	0	0	0
HIV-1											1				1	2	16	10	5
HTLV-1																0	0	0	0
Influenza A virus	2	7	3			1	4		4	1	14		2	2	3	43	138	126	47
Influenza B virus						1	1		1		2	1	2	1		9	22	11	3
Legionella pneumophila (all serogroups)																0	5	0	0
Legionella species											1					1	1	0	1
Leptospira species	2					1						1	1			5	2	1	5
Measles virus																0	1	6	0
Mumps virus		1														1	1	1	0
Mycoplasma pneumoniae	2									1	3		1	1		8	23	28	23
Neisseria gonorrhoeae	3	3	1				9	1	2		4		2	3		28	49	63	41
Parainfluenza virus Type 1									1							1	1	2	4
Parainfluenza virus Type 2																0	2	3	
Parainfluenza virus Type 3	3	2	6				7		1		4	2	1	1		27	24	13	3
Parvovirus			3				1		1		2	1				8	18	18	17
Pneumocystis carinii		1														1	1	1	3
Respiratory Syncytial virus	2	1	1	1			4				5	1		2		17	39	29	40
Rickettsia - Spotted Fever Group									1			2				3	4	4	6
Ross River virus	1		1							1	2	2	2	3	2	14	26	12	39
Rubella virus															1	1	0	0	0
Salmonella paratyphi A																0	0	0	0
Salmonella paratyphi B																0	0	0	0
Salmonella typhi																0	0	0	0
Shigella dysenteriae																0	0	0	0
Shigella flexneri																0	0	0	0
Streptococcus Group A	5	3	4				4		6	2	6	1	1	1	5	38	72	68	65
Toxoplasma gondii																0	3	1	2
Treponema pallidum	5	1	3		1		17	1	6		16	2	2	7	1	62	118	114	116
Trichomonas vaginalis	3						1				2			2		8	17	8	9
Varicella Zoster virus	9	17	3	1			18		13	2	35	14	4	5	3	124	226	208	198
Yersinia enterocolitica																0	0	0	0
TOTAL	126	209	83	18	6	4	238	2	142	51	376	130	59	82	54	1580	2937	2857	2664

REGIONS

1 Cairns
2 Gold Coast/Northern Rivers
3 Ipswich

4 Mackay
5 Mount Isa
6 New England
7 North Brisbane Suburbs

8 Northern Territory
9 Redcliffe
10 Rockhampton
11 South Brisbane Suburbs

12 Sunshine Coast
13 Toowoomba
14 Townsville
15 Wide Bay/Burnett

September 2010 and further historical clinical data can be obtained by contacting your local Medical Liaison Officer



QML Pathology updates Dec 10



The Pathologists and staff at QML Pathology would like to wish you a joyous festive season, filled with good health, happiness and prosperity.

WARFARIN DOSING OVER THE CHRISTMAS PERIOD

QML Pathology wishes to advise that over the upcoming Christmas period, the QML Pathology Warfarin Care Clinic will be closed. Please note that **NO NEW REGISTRATIONS** will be taken from 5.00pm on Tuesday, 14 December 2010, with the registration line re-opening at 7.00am on Tuesday, 4 January 2011.

During this period, it is essential that any new patients on Warfarin are supplied with instructions, as QML Pathology will be unable to monitor them until we re-open in January. Unfortunately, QML Pathology cannot provide Warfarin control for patients under a period of two weeks.

As a result, we would appreciate if you could arrange a colleague to supervise any Warfarin patients you control while you are on leave. Please note that this also applies to interstate patients on holiday in Queensland.



QML Pathology updates Dec 10

>> Introducing our New Haematologist



Dr James Daly RCPA RACP

Dr James Daly graduated with a Bachelor of Medicine and Bachelor of Surgery in 1995 from the University of Queensland, and obtained admission to the Royal College of Physicians and the Royal College of Pathologists of Australia in 2005.

Dr Daly brings with him a wealth of knowledge and experience obtained during his appointment as Staff Specialist, Haematologist at the Royal Hobart Hospital; a position he held since completing his joint training for fellowship.

Dr Daly has experience in both clinical and laboratory haematology, with a special interest in haemophilia and transfusion medicine, and represents his specialty on several national boards and committees.

Phone: (07) 3121 4008

Email: James.Daly@qml.com.au

>> Doctor's Noticeboard

Dr Saurabh Gupta, Gastroenterologist, has recently opened a practice in the Evan Thomson Building at The Wesley Hospital.

Dr Gupta's areas of special interests include upper GI endoscopy and colonoscopy, endoscopic ultrasound, ERCP, endoscopic mucosal resection of advanced neoplasia, and enteroscopy, with a particular special interest in advanced diagnostic and therapeutic endoscopic procedures.

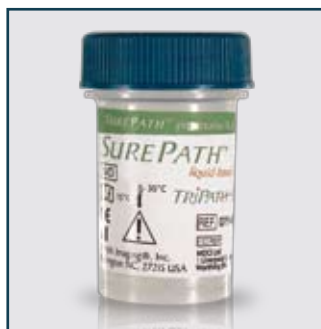
At the Wesley, he offers a full service with consulting and endoscopy sessions as well as urgent care of hospital inpatients. Dr Gupta will be combining his practice at The Wesley Hospital with a staff specialist position at Princess Alexandra Hospital in Woolloongabba.

Address: Suite 9, Level 9, Evan Thomson Building, 24 Chasely Street, Auchenflower

Phone: (07) 3870 5705

Fax: (07) 3870 4434

>> Changes to Liquid-Based Cytology at QML Pathology



Please note that from August 2010 QML Pathology has changed its liquid-based cytology vials from ThinPrep to BD SurePath™. The main difference of BD SurePath™ for smear takers and doctors is that the collection device is placed into the vial for processing at the laboratory following the preparation of a conventional slide.

Therefore, QML Pathology **will no longer be supplying ThinPrep vials**. We will, however, continue to accept and process ThinPrep samples in the interim.

If you have any questions regarding BD SurePath™, please contact Cytology on **(07) 3121 4485** or your local Medical Liaison Officer.

QML Pathology updates Dec 10

**All New
Online Results**

>> QML Pathology Launches Path-Way

Path-Way is a new web-based application by QML Pathology, providing you with real-time results, anytime, anywhere.

Instant Access

As soon as the result is available at the laboratory, it is available at Path-Way (**www.path-way.com.au**) - enabling you to view your patients' results quickly, efficiently and securely over the Internet.

With no paper to handle, instantaneous delivery and secure access, Path-Way ensures your patients' results are available real-time, anywhere, on time, all the time.

Path-Way Works for You

If you are a solo practitioner or work in a group practice, Path-Way can be tailored to create a central register designed to suit your preferences. Allowing you to access and manage only those results you wish to.

New Features

- Increased search functionality, including new filters
- Unique username and password
- Update your account details online
- View pending requests
- Print off hard copy reports in a familiar format
- View interactive charts
- View cumulative results

To Register for Path-Way

New Online Results Users

- Go to **www.path-way.com.au** and complete the registration form.

Existing QML Pathology Website Online Results Users

- All existing username and password details have already be migrated into Path-Way. All you need to do is login.
- Go to **www.path-way.com.au** OR **www.qml.com.au** and select the Path-Way Online Results button at the bottom of the screen (you will be redirected to the Path-Way website) and login with your current QML Pathology website details. You will be prompted to update your accounts details including your username and password.
- Your online results can now be accessed via **www.path-way.com.au** or by clicking on the Path-Way Online Results Button at **www.qml.com.au**.

If you have any questions regarding Path-Way, please contact your local Medical Liaison Officer.



Path-Way

By QML Pathology

QML Pathology Website

Please note that with the launch of Path-Way, online results is now a separate system to the QML Pathology website. This means that you will require a username and password for both the website and for Path-Way.

If you would like your QML Pathology website and Path-Way username and passwords to match, please contact marketing on **info@qml.com.au** or **(07) 3121 4506** after you have logged into Path-Way.

Your QML Pathology website username and password gives you access to our dedicated doctors section behind a secure login. Once logged in you have access to the Test Reference Manual, Publications, Added Test Service, Warfarin Service, Travel Health & Vaccine Service, Ordering Products and Professional Development.



QML Pathology updates Dec 10

New Collection Centres

Algester

Algester Star Shopping Centre
Shop 4B, 10 Silkwood St
Phone: (07) 3272 6666
Opening Hours:
8.00am – 12.00pm (Mon-Fri)

Brisbane City

Level E, Myer Centre
91 Queen St
Phone: (07) 3211 3215
Opening Hours:
8.00am – 12.30pm
1.00pm – 4.00pm (Mon-Fri)

Cairns City

377 Sheridan St
Phone: (07) 4031 2668 or
(07) 4031 2663
Opening Hours:
8.30am – 11.45am (Mon-Fri)

Cairns City

67 McLeod St
Phone: (07) 4041 1216 or
(07) 4041 5490
Opening Hours:
8.30am – 4.30pm (Mon-Fri)

Eagleby

Shop 3B, 120 Riverhills Rd
Phone: (07) 3287 5895
Opening Hours:
7.30am – 3.30pm (Mon-Fri)

Elanora

Shop 6, 19th Ave Shopping Centre
155 Nineteenth Ave
Phone: (07) 5508 2323
Opening Hours:
8.00am – 1.00pm
2.00pm – 4.30pm (Mon-Fri)

Gailes

Shop 14, 65 Old Logan Rd
Phone: (07) 3879 3764
Opening Hours:
8.00am – 1.00pm (Tue & Fri)

Hyde Park

Castletown Shopping World
Cnr Woolcock St & Kings Rd
Phone: (07) 4772 3332
Opening Hours:
8.30am – 12.30pm
1.00pm – 4.30pm (Mon-Fri)
8.00am – 12.00pm (Sat)

Manly West

148 Radford Rd
Phone: (07) 3396 0560
Opening Hours:
8.30am – 1.30pm (Mon-Fri)

South Brisbane (Southbank)

Shop 2B, 189 Grey St
Phone: (07) 3255 3548
Opening Hours:
8.00am – 12.00pm (Mon-Fri)

Thornlands

Suite 1, 2 Cleveland-Redland Bay Rd
Phone: (07) 3286 6128
Opening Hours:
8.00am – 12.00pm (Mon-Fri)

Woodridge

57 Station St
Phone: (07) 3209 4253
Opening Hours:
8.00am – 1.00pm (Mon-Fri)

Relocated Collection Centres

Atherton

25 Louise St
Phone: (07) 4091 2788
Opening Hours:
8.00am – 12.30pm
1.30pm – 4.00pm (Mon-Fri)
8.00am – 11.30am (Sat)

Goodna

Shop 3, 12 Queen St
Phone: (07) 3288 5303
Opening Hours:
8.30am – 5.00pm (Mon-Fri)
8.00am – 12.00pm (Sat)