

Health Matters

Thyroid Nodules

Who to scan and what to do with the results?

Mr Simon Harper



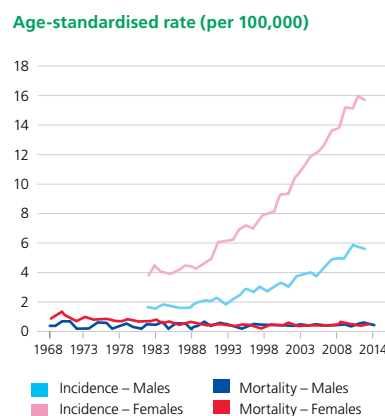
Wakefield Hospital

Area: Endocrine and General Surgery
Written by: Mr Simon Harper, Endocrine and General Surgeon, ph (04) 381 8120

Thyroid nodules are very common and the cause of much anxiety for patients and doctors alike, but the vast majority of nodules have no indication for surgery and may not require any treatment at all.

If you look hard enough with a high-resolution ultrasound scanner, it is possible to find a thyroid nodule in 68%¹ of the population. Such scanners are in part responsible for the increasing worldwide incidence of thyroid cancer but so are we, the doctors who order thyroid ultrasound scans. Despite the considerable increase in detection of thyroid cancers there has been no associated increase in mortality (Figure 1). It is widely accepted that this "epidemic" is almost entirely due to the detection of micro-cancers (papillary thyroid cancer less than 1cm in maximum diameter), which for the most part, would have caused no harm had they remained undiagnosed. Avoidance of diagnosis would seem to be in most patients' best interests. *Continued on page 3*

Figure 1: Thyroid Cancer Incidence and Mortality in Australia



What's inside

Thyroid Nodules > **1, 2, 3 & 4**

Message from Acurity > **2**

Upcoming CME Meetings > **5**

Acute Knee Injury > **6**

Private Cancer Care Comes to Bowen Hospital > **8**

Bowen Retinal Surgeons – First in NZ to Trial New Technology > **9**

Targeting Prostate Cancer: MRI / Ultrasound Fusion Guided Biopsy of the Prostate > **10**

Fibroids – The Easy Culprit > **12**

Acurity Achieves Certification > **14**

Bowen Icon Cancer Centre Updates

– Dr Ken Romeril > **14**

– Dr Catherine Barrow > **15**

New Consultants

– Mr Helge Koeck > **15**

– Dr Anne-Marie Yardley > **15**

Contact Details > **16**

Connect 2018, GP Conference > **16**



Acute Knee Injury

Mr Angus Wickham
Page 6 >



Save the date

Acurity GP Conference
Page 5 >



Bowen Retinal Surgeons

Page 9 >



Message from Acurity Health

Chief Executive's Message
Ian England, Chief Executive, ph (04) 920 0131



Hi Everyone. This is my first time contributing to Health Matters so I'd like to update you on a number of things happening around Acurity Group and its hospitals.

Firstly we are delighted to announce the formal opening of the Bowen Icon Cancer Centre. We were privileged to have both the Prime Minister and Minister of Health at the opening ceremony. Referrals are now being taken and a number of patients have been seen. I am sure the Cancer Centre has a big contribution to make to health services in the Wellington Region.

Acurity continues to invest in its hospitals to ensure they deliver high quality care to our patients while providing the best clinical support to our specialists. As part of this, detailed work is now underway on the design of the new Wakefield Hospital. The early designs look exciting and our goal is to have a leading edge hospital that enhances the Wakefield tradition into the next iteration. At Royston we are planning additional theatres as well as improvements to the way day patients are cared for to make it simpler and more comfortable.

Our jam packed CME Schedule for this year is now complete. For those of you who attended these meetings I thank you and hope you gained a lot out of them. I encourage you to keep an eye out on our website for the 2018 Schedule which will be available early next year, www.acurity.co.nz

Finally, please save the date in your diaries for Connect 2018 Acurity GP Conference which will be held at Te Papa, Wellington on Friday 25 – Saturday 26 May 2018.

Best wishes


Ian England
Chief Executive
Acurity Health Group Ltd



Thyroid Nodules

Continued from page 1

Fear of malignancy within a thyroid nodule often drives the need for investigations but thyroid nodules don't only cause problems for patients by being (potentially) cancerous. Symptoms related to the size of the thyroid gland or dysregulation of thyroid hormone production can often be the indication for surgical treatment. In some – but not all – of these cases, knowledge of the morphology of the thyroid gland can assist with decision making.

Undoubtedly there are many patients who benefit from thyroid investigations and the appropriate use of ultrasound technology is central to diagnosis of thyroid pathology. The challenge we face is to decide who will benefit from thyroid investigations.

Certain "red-flag" symptoms warrant urgent investigation, and patients with these

symptoms need a thyroid ultrasound and a specialist assessment (Table 1).

In other circumstances, and certainly in cases when no goitre or thyroid nodule is palpable, the decision to order a thyroid ultrasound is probably best made by a specialist. The lack of an ultrasound report by no means precludes referral to a specialist for assessment. Many specialists are able to perform targeted thyroid ultrasound examinations in their public and private practice.

Ultrasound is not only used for patients at a high risk of thyroid cancer but also for assessing patients with a lower level concern. There are multitude ways in which thyroid ultrasound scans are reported and the interpretation of these reports can be very tricky. In order to try and risk-stratify thyroid nodules

on the basis of ultrasound findings the American Thyroid Association has categorised certain morphological features to help interpret these results and guide the use of FNAC (Fine Needle Aspiration Cytology) (Figure 2). The American College of Radiologists has also produced a similar classification system (TI-RADS, Figure 3, page 4) with either approach having a similar predictive capability².

Both methods stratify thyroid nodules on the basis of their risk of malignancy and provide size cut-offs to guide the clinician when trying to decide which nodules to biopsy. FNAC results can similarly be difficult to decipher. Within the Wellington region, thyroid cytology is reported in a standardised fashion. FNAC results are stratified and the most commonly used tool

here is the Bethesda System for the Reporting of Thyroid Cytopathology (Table 2, page 4) which once again helps to guide the clinical recommendation. This system grades thyroid cytology from I through to VI and quantifies risks of malignancy. Recently we have assessed these risks specifically for the local population and our data shows malignancy rates in line with the international figures.

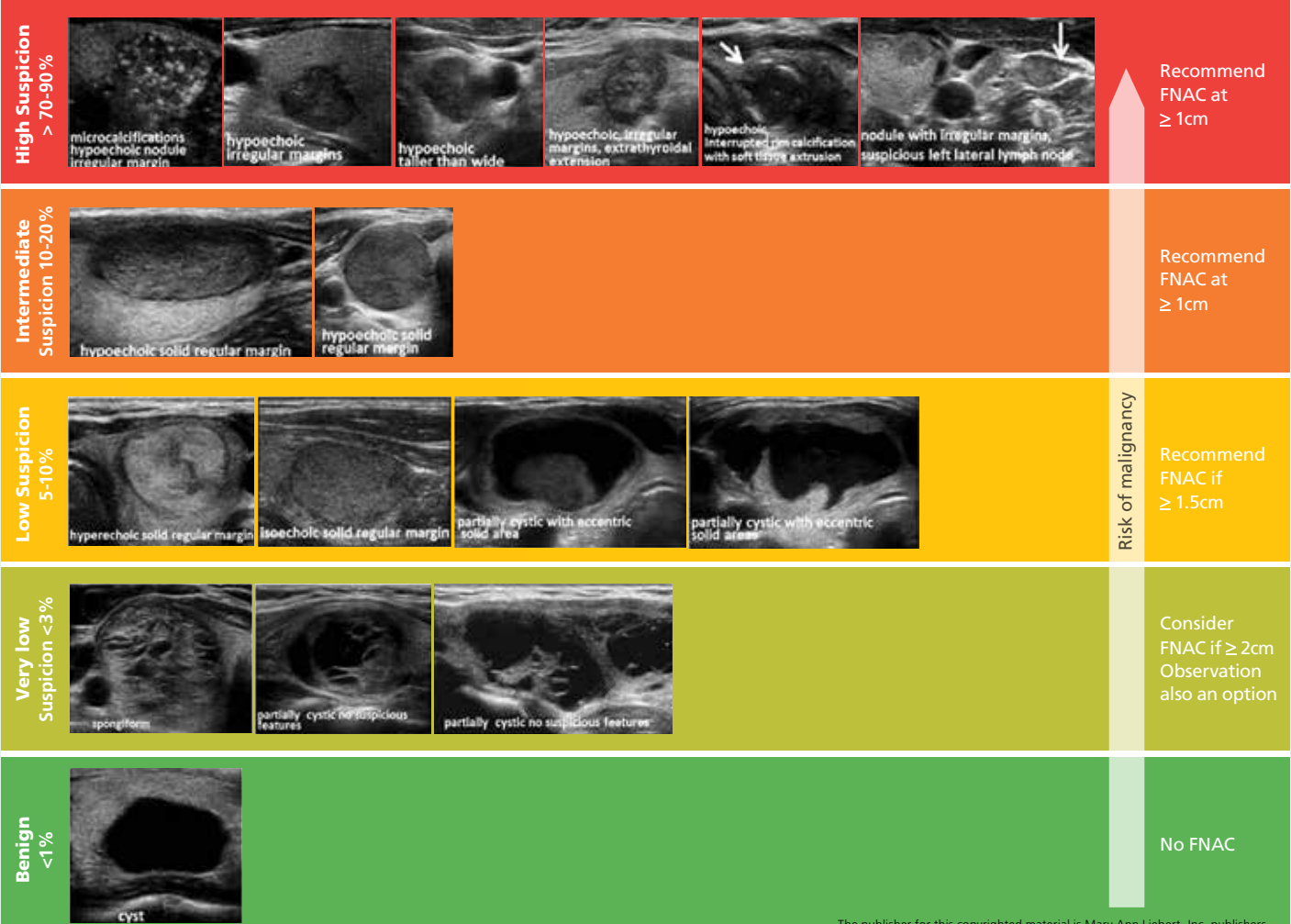
Thyroid surgery is usually extremely well tolerated by patients and can be performed safely with a low complication rate. Nevertheless surgery is best reserved for therapeutic purposes and only used as a diagnostic tool where there is a significant risk of malignancy that cannot be more clearly defined by another approach.

Continued on page 4



Mr Simon Harper

Figure 2: The American Thyroid Association Sonographic Patterns and Risk of Malignancy



The publisher for this copyrighted material is Mary Ann Liebert, Inc. publishers.

Thyroid Nodules

Continued from page 3

Mr Simon Harper



In the absence of worrying signs or symptoms, avoiding a thyroid ultrasound scan in the first instance is probably the preferred approach but this is not always achievable. By assessing patients in a standardised manner, and through the appropriate use of ultrasound and FNAC, we can accurately predict which patients should have surgery while reassuring most patients of the benign nature of their thyroid nodule.

Additional References

1 Guth S, Theune U, Aberle J, et al. Very high prevalence of thyroid nodules detected by high frequency (13 MHz) ultrasound examination. *Eur J Clin Invest.* 2009;39:699–706

2 Yoon JH, Lee HS, Moon HJ, et al. Malignancy Risk Stratification of Thyroid Nodules: Comparison Between the Thyroid Imaging Reporting and Data System and the 2014 American Thyroid Association Management Guidelines. *Radiology* 2016;278(3):917–924.

F1 Figure 1 credit: Australian Institute of Health and Welfare Data (2017)

T1 Table 1 credit: Standards of Service Provision for Thyroid Cancer Patients in New Zealand – Provisional. NZ MoH 2013

F2 Figure 2 credit: Haugen BR, Alexander EK, Bible KC et al. *Thyroid* 2016;26(1):1-133

F3 Figure 3 credit: Tessler FN, Middleton WD, Grant EG, et al. *J Am Coll Radiol.* In press; 2017

T2 Table 2 credit: Cibas ES, Ali SZ. *Am J Clin Pathol* 2009;132:658-665.

Figure 3: TI-RADS Criteria

Composition (Choose 1)	Echogenicity (Choose 1)	Shape (Choose 1)	Margin (Choose 1)	Echogenic Foci (Choose all that apply)
<div>0 Cystic or almost completely cystic</div> <div>0 Spongiform</div> <div>1 Mixed cystic and solid</div> <div>2 Solid or almost completely solid</div>	<div>0 Anechoic</div> <div>0 Hyperechoic or isoechoic</div> <div>1 Hypoechoic</div> <div>2 Very Hypoechoic</div>	<div>0 Wider than tall</div> <div>3 Taller than wide</div>	<div>0 Smooth</div> <div>0 Ill-defined</div> <div>3 Lobulated/irregular</div> <div>3 Extra-thyroidal extension</div>	<div>0 None/large comet tails</div> <div>1 Macro-calcification</div> <div>2 Peripheral calcification</div> <div>3 Punctate echogenic foci</div>
Add the points from each column to get TI-RADS Score				
0 points	2 points	3 points	4–6 points	≥ 7 points
TR 1 Benign	TR 2 Not Suspicious	TR 3 Mildly Suspicious	TR 4 Moderately Suspicious	TR 5 Highly Suspicious
No FNAC	No FNAC	≥ 1.5cm follow up ≥ 2.5cm FNAC	≥ 1.0cm follow up ≥ 1.5cm FNAC	≥ 0.5cm follow up ≥ 1.0cm FNAC

Table 2: The Bethesda System for Reporting Thyroid Cytopathology		
Bethesda Grade	Risk of Malignancy	Typical Management
I Non-diagnostic	1-4%	Repeat FNAC
II Benign	0-3%	Clinical Follow-up
III AUS/FLUS*	5-15%	Repeat FNAC vs Diagnostic Surgery
IV Follicular Neoplasm	15-30%	Diagnostic Hemithyroidectomy
V Suspicious for Malignancy	60-75%	Hemi or Total Thyroidectomy
VI Malignant	97-99%	Total Thyroidectomy

* AUS = Atypia of Undetermined Significance
FLUS = Follicular Lesion of Undetermined Significance

Mr Simon Harper is an Endocrine and General Surgeon consulting at the Wakefield Specialist Medical Centre and operating at Wakefield Hospital.
E: specialists@wakefield.co.nz
P: (04) 381 8120
F: (04) 381 8121
EDI: acurityh

Upcoming CME Meetings



2017 – Scheduled Meeting		2018 – Upcoming Meetings			
Date	Thursday 19 October	Specialty	Venue		
Speaker	Mr Jonathon Richards, Orthopaedic and Spinal Surgeon	General Surgery	Hawke's Bay		
Specialty	Orthopaedics	Ophthalmology	Hawke's Bay		
Topic/Details	Hip and Knee Update and Diagnosing the Patient with Dual Pathology	Urology	Hawke's Bay		
Venue	Kapiti Coast – Lindale Conference Centre	Musculoskeletal	Hawke's Bay	Wellington	Kapiti Coast
CME endorsed	2 credits	Oncology		Wellington	Kapiti Coast
		General Surgery		Wellington	

To register please email Sarah or Persephone events@acurity.co.nz
Visit www.acurity.co.nz to keep up to date with events at Acurity.

Please let us know what you'd like to hear about, email Sarah or Persephone events@acurity.co.nz

GP CONFERENCE

Connect 2018

25 – 26 May 2018

More informative & more relevant
Te Papa, Wellington // www.acurity.co.nz

Connect 2017 GP feedback
"One of the best run high quality conferences I've been to – thanks"
"Great meeting, perfect venue and a wide range of interesting speakers"
"Really enjoyed the conference, it was interesting, an exciting opportunity to learn new things and meet with my colleagues..."
"Superb conference as usual..."

Acute Knee Injury



Mr Angus Wickham

Royston Hospital

Area: Orthopaedics
Article written by: Mr Angus Wickham, Orthopaedic Surgeon, ph (06) 873 1158

Knee injuries occur commonly within our active population. The majority of these injuries are mild and can be appropriately cared for in the primary setting, however seven conditions require urgent specialised treatment.

ACC in conjunction with key health care professionals have produced a useful document for the initial care of acute knee injuries. The following is a quick guide based on that document to assist your decision making when faced with an acute knee injury. I encourage everyone to read the complete guidelines which can be found at the link at the end of this article.

The knee is a synovial joint between the femur, tibia and patella which allows complex movements in multiple directions.

The main structures of the knee are the medial and lateral collaterals, anterior and posterior cruciate, medial and lateral menisci and the posterolateral corner complex. (See Figure 1) Obtaining a detailed history gives many clues to the presenting condition. Questions that should be asked include the mechanism of injury, location of contact, location of pain, and ability to weight bear after the injury. Typically high energy events result in more severe injury, however elderly osteoporotic

patients and obese patients can sustain significant injury with low energy mechanisms. The presence of swelling and an audible pop at the time of the injury suggests significant inter-articular injury. Locking, catching and subsequent instability are generally symptoms that require further investigation. A screen of the patient's general health and symptoms associated with infection should also be explored. Always beware of the patient with a non-injury related condition that presents after a trivial injury.

Examination of an acutely injured knee can be very distressing for the patient; typically discomfort will prevent a complete examination. There are key examination findings that should be sought, and which most patients can tolerate in the acute phase. These include performing a straight leg which confirms integrity of the extensor mechanism. Determining if multiple ligaments are injured, this can typically be determined without formal grading of ligaments integrity. The degree and timing of swelling should be noted. Assessing the neurological status of the foot and symmetry of pulses is essential.

X-rays should be sought if any of the five criteria outlined by the Ottawa Knee Rules are present (Figure 2). In addition a tense haemarthrosis suggests significant inter-articular damage and an x-ray is suggested. The images required in the acute setting include an AP and lateral with the knee slightly bent. A skyline view is required to adequately visualise the patella.

Once these conditions have been ruled out, it is appropriate to manage patients with simple analgesia and advice on RICE (rest, ice, compression, elevation) and avoiding HARM (heat, alcohol, running, massage). Splinting of knees after an acute injury is generally not required unless there is a suspicion of an MCL injury.

If internal derangement of the knee is not suspected then a review in the primary setting is suggested after two to three weeks. At this time a formal assessment can be undertaken and more information can be elicited from the examination. However, if internal derangement is suspected at any point the following actions are suggested.

If the patient has a locked knee or suspicion of a posterolateral corner complex injury a semi-urgent referral to a specialist is indicated. If an isolated meniscal injury, MCL, PCL or ACL injury is suspected then referral to both an Orthopaedic specialist and a physiotherapist is indicated. From there a treatment programme will be formulated according to functional compromise and expectations of the patient.

Knee injuries can pose a significant diagnostic dilemma. There are many structures that can be injured, and there are conditions that mimic knee injuries. Using the guide lines provided by ACC, serious knee conditions can be identified promptly and referred while less urgent injuries can be managed appropriately.

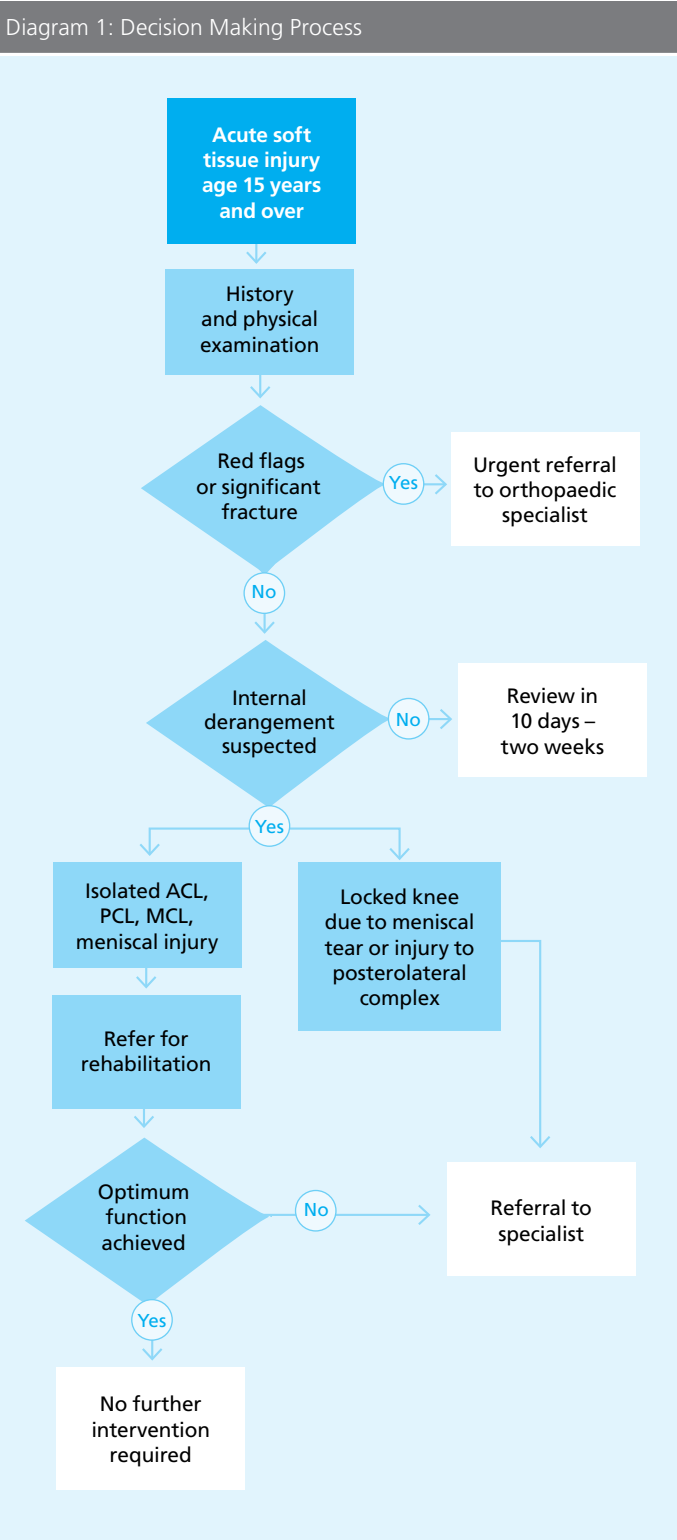


Figure 2: Ottawa Knee Rules

X-ray if any of:

- Age +55
- Tender head of fibula
- Isolated tenderness patella
- Inability to flex >90
- Inability to bear weight (four steps) at time of injury and in examination.

Once the initial history, examination and x-rays are completed the clinician should pause. If any of the following seven conditions are present then urgent referral for orthopaedic advice is suggested:

1. Neurovascular compromise
2. Extensor mechanism disruption
3. Septic arthritis
4. Bleeding disorders
5. Suspicion of cancer
6. Multiple plain laxity of the knee
7. Significant fracture.

Mr Angus Wickham is an Orthopaedic Surgeon consulting at the Royston Centre, 325 Prospect Road, Hastings and operating at Royston Hospital.

E: reception1@hbsurgical.co.nz
P: (06) 873 1158
F: (06) 873 1161
EDI: surgshbj

The Diagnosis and Management of Soft Tissue Knee Injuries: Internal Derangements. <http://ccpor.ca/wp-content/uploads/New-Zealand-Diagnosis-and-Management-of-Soft-Tissue-Knee-Injuries.pdf>

Private Cancer Care Comes to Bowen Hospital

Darien Montgomerie



Bowen Hospital

Area: Oncology
Article written by: Darien Montgomerie, Site Manager, Bowen Icon Cancer Centre, ph (04) 896 0200

In July, Wellington welcomed its first private cancer care centre which will be able to treat hundreds of patients each year. The centre is already benefiting people like Wellington resident John Bradbury.

Mr Bradbury was diagnosed with cholangiocarcinoma in July 2011 after blood results from a hernia operation subsequently revealed a large tumour in his bile duct. After being told surgery was high risk, John took the palliative care option where he was given an expected four months to live. After travelling to see his son in London he decided to seek a second opinion which led to a successful surgery. However, after a long post-surgery recovery he was diagnosed in 2013 with metastatic cholangiocarcinoma and underwent chemotherapy in three rounds over the next three and a half years.

“When I was told my cancer was terminal with a short life expectancy, I was very disappointed as I had only been retired for 18 months. It left me with little time to achieve the things I had hoped to do, but I was soon determined to maximise what time I had left and soon took a very positive approach,” Mr Bradbury said.

Mr Bradbury’s chemotherapy treatment started in the public hospital, but when it came to Keytruda® as his next treatment he had to travel to Auckland to a private centre. However, the opening of the Bowen Icon Cancer Centre just weeks

after he started treatment in the north, left him grateful to have the option of receiving private care close to home.

“Having my treatment at Bowen is a relief after having had to commence the treatment in Auckland. Not only does it save on the inconvenience and costs of being treated in Auckland, but the new facility at Bowen is modern, spacious and accessible. It has provided me and the many that will follow with a much needed high quality service.”

The new Bowen Icon Cancer Centre has been made possible through a partnership between Australia’s largest dedicated cancer care provider, Icon Group, and New Zealand’s Acurity Health Group.

The state-of-the-art centre offers the latest oncology technology and treatment techniques ensuring local residents have access to world-class private cancer care in a supportive and caring environment.

“As John’s treatment may only be given in a private setting, it is fantastic that patients like him can now receive treatment close to home. This means he can spend more time with his family and less time travelling and staying in other cities.



This also keeps him linked in with the health services that have been caring for him for the past four years, providing continuity and maintaining existing relationships” Medical Oncologist Dr Brendan Luey said.

Bowen
Icon cancer centre

The centre currently offers treatment for cancer and blood disorders, with radiation oncology services to come on board by the end of 2018.

For more information, visit www.bowen.co.nz



Bowen Retinal Surgeons

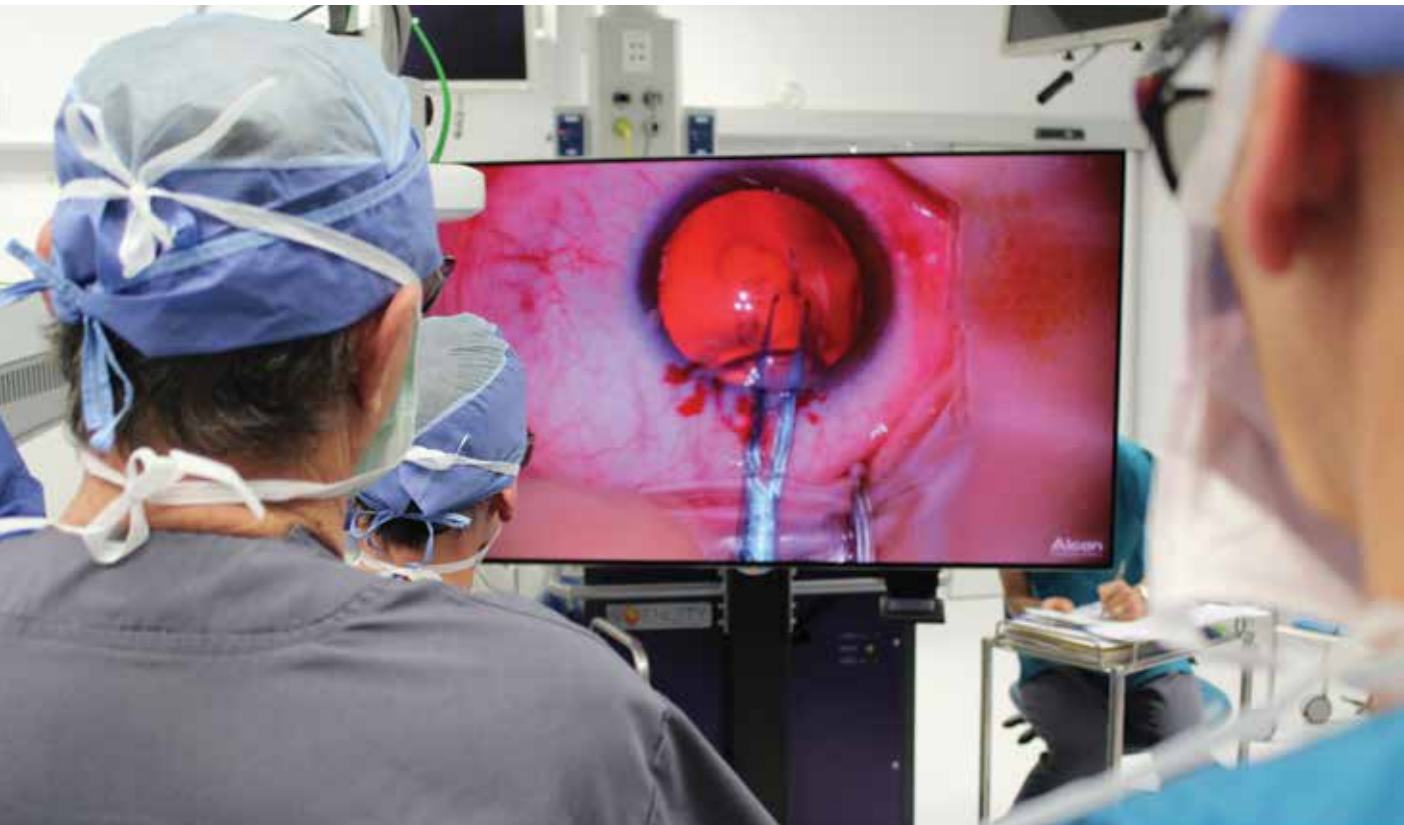
First in New Zealand to Trial New Technology

Simon Auty



Bowen Hospital

Area: Ophthalmology. Article written by: Simon Auty, Theatre Team Leader
OtoRhinoLaryngology, Ophthalmology, Oral & Maxillofacial, ph (04) 479 2069



Over the last month the Retinal Surgeons at Bowen have been the first in New Zealand to test a number of new technological developments.

The Ngenuity 3D Digital Visualisation System by Alcon and TruVision is a 3D camera system paired with a massive 50 inch 3D screen that allows surgeons to operate looking at a screen instead of through a microscope to see the eye for surgery. The entire team benefits from being able to view the surgery in real time enabling them to better assist the surgeon.

The technology reduces the amount of light that is

needed to conduct the surgery minimising light exposure to the patient’s eye. With different software filters it allows us to see different pathologies in the eye that would normally require expensive microscope filters or additional tests. As this technology is developed it offers the possibility of remote surgery paired with a robot.

In another New Zealand first we recently used a 10000cpm cutter (I know it doesn’t sound like much!). We have been using

a 27G system (all instruments that enter the eye are 0.4mm diameter) to do the vitrectomy in retinal surgery for two years and were the first to adopt this routinely in Australasia.

In order to remove the vitreous, a long strand molecule, we were using a high speed cutter which operated at 7500 cuts per minute. The new upgrade to 10000cpm has the advantage of speeding the surgery by allowing us to clear the vitreous faster.

As technology develops even further, the future of ophthalmology looks interesting.



Targeting Prostate Cancer

MRI / Ultrasound Fusion Guided Biopsy of the Prostate

Wakefield Hospital | Area: Urology. Article jointly written by: Mr Grant Russell and Mr Rod Studd, Urologists.
Mr Grant Russell – ph (04) 473 6207 and Mr Rod Studd – ph (04) 920 0162

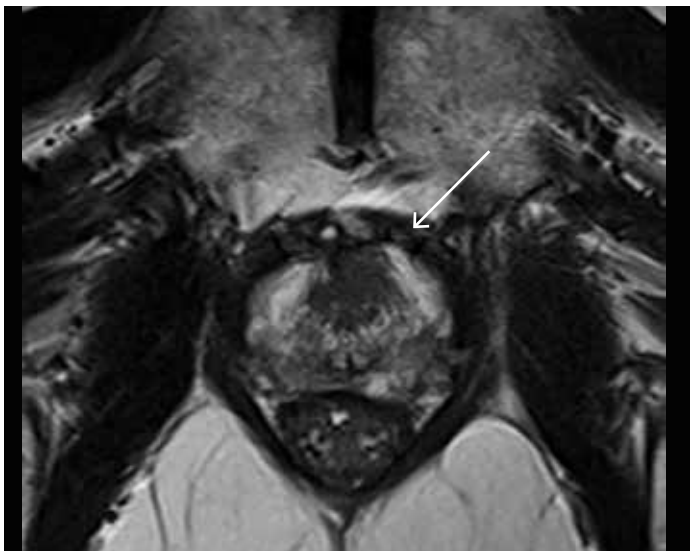


Figure 1: A cancer located anteriorly within the prostate

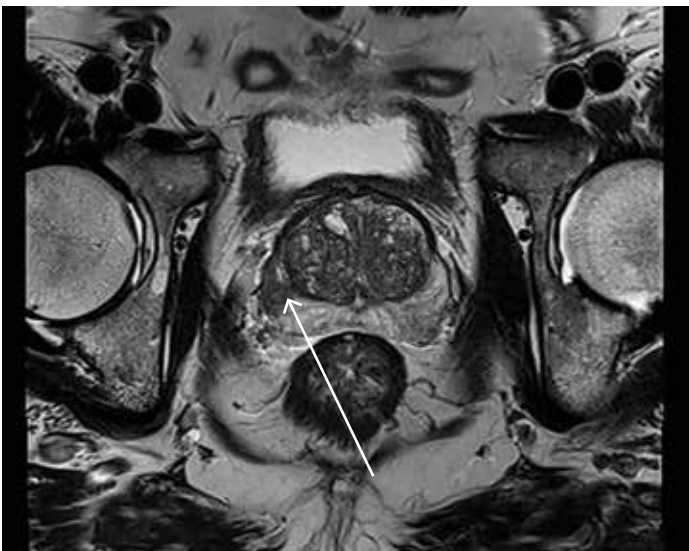


Figure 2: Prostate cancer appears as an intense low-signal area on T2 weighted images

The widespread adoption of Prostate Specific Antigen (PSA) testing in the 1980's and 1990's lead to a dramatic rise in the diagnosis of prostate cancer. Health Department Statistics data from 2012 confirms the trend apparent over a number of years in New Zealand with approximately 3100 new cases a year diagnosed and 600 deaths per year.

Although, as the name of the test implies it is "prostate specific", it is not prostate cancer specific and PSA may be elevated because of prostate cancer, prostate enlargement and inflammatory change. As expected, the detection of a raised PSA reading is the source of much anxiety and concern from patients; "do I, or do I not have prostate cancer"?

The usual steps in the diagnosis of prostate cancer include the recognition of an elevated PSA reading, rectal examination of the prostate, then trans-rectal ultrasound (TRUS) guided prostate biopsy.

The latter is generally done under local anaesthetic and although a short procedure performed in the outpatient setting, it can be painful and risk serious infection. There is no standardised technique for sampling the prostate and generally trans-rectal ultrasound cannot "see" prostate cancer; the ultrasound allows visualisation of the prostate and the urologist hopes that the sequential needle biopsing of the prostate systematically stepping through the gland with the aid of the ultrasound will obtain a true representation of the tissue.

Small cancers and difficult to access cancers, often located anteriorly in the prostate (Figure 1) can be missed on trans-rectal ultrasound guided prostate biopsy. Cancers detected this way may be low grade and not require active treatment; equally the false-negative rate of this technique may be in the region of 35%.

Multi-parametric MRI scanning of the prostate allows us to "see" prostate cancer using a combination of anatomic (T2), diffusion weighted images (DWI) and dynamic contrast-enhanced (DCE) imaging. Prostate cancer appears as an intense low-signal area on T2 weighted images (Figure 2). DWI considers the differences in Brownian or random movement of water in tissue; the movement is more rapid in the normal prostate and slower in denser neoplastic tissue (Figure 3). DCE views the

vascularity of cancer; due to the increase in angiogenesis, there is an increase in uptake and washout of contrast (Figure 4). A standardised system of reporting has been developed using information from these imaging modalities to produce a score reflecting the likelihood of a significant prostate cancer known as the PIRADS (Prostate Imaging Reporting and Data System) score. A PIRADS score of four or five suggests a "significant" prostate cancer that requires further investigation with targeted prostate biopsy.

Multi-parametric MRI scanning of the prostate not only allows visualisation of areas within the gland suspicious for prostate cancer; it also provides information on staging of the disease and it may prove to be useful in the management of those patients with low risk disease on an active surveillance programme.

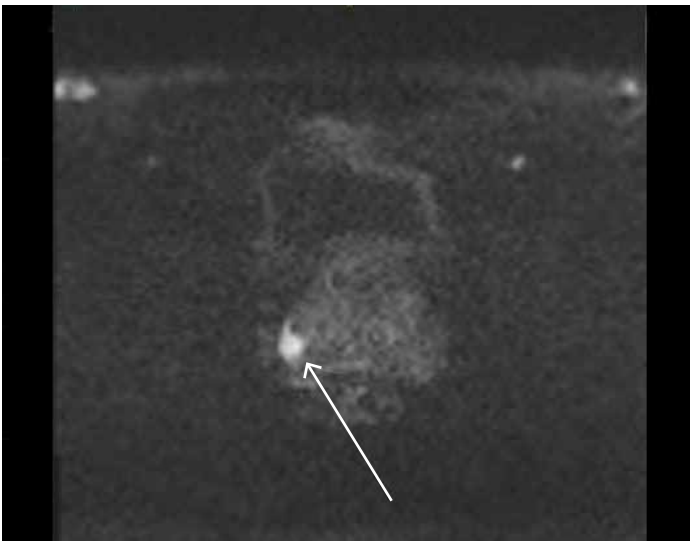


Figure 3: DCE views the vascularity of cancer; due to the increase in angiogenesis, there is an increase in uptake and washout of contrast

It has been particularly helpful where a previous standard TRUS biopsy returns as negative yet the PSA continues to rise and a second biopsy may be required. Urologists in Wellington have been fortunate in having access to a state of the art (T3) MRI scanner at Pacific Radiology for the last two years and considerable experience and collaboration has evolved in the use of MRI to manage the disease.

A natural extension of MRI imaging of the prostate has been to "fuse" the images in real time with ultrasound guided prostate biopsy providing a "navigated" targeting of suspicious MRI changes. Direct biopsing of these is possible on MRI alone but it is time consuming, technically difficult and limited in the extent of the sampling possible.

A 3D image of the prostate and the area of suspicious change is created from the MRI scan prior to the fusion biopsy and uploaded onto a laptop – this is

taken to the operating theatre and under general anaesthetic the stored MRI images are accurately aligned with real time ultrasound of the prostate to direct the biopsy device (Figure 5). Fusion biopsy at Wakefield Hospital is done transperineally, minimising the risk of infection. Common adverse effects include transitory haematuria and haematospermia together with bladder outlet obstructive symptoms. It requires a short general anaesthetic and is generally performed on a day stay basis.

Fusion biopsy of the prostate is thought to be two to three times more sensitive than standard TRUS biopsy in detecting prostate cancer and moreover, in a recent study 40% of men with a significant (Gleason 7 and above) were only detected on fusion biopsy.



Figure 4: Brownian or random movement of water in tissue; the movement is more rapid in the normal prostate and slower in denser neoplastic tissue. (Image contrast enhanced.)

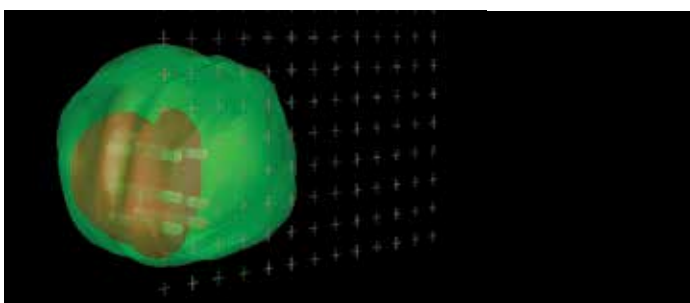


Figure 5: A 3D image of the prostate and the area of suspicious change which has been created from the MRI scan

Fusion biopsy of the prostate is now available at Wakefield Hospital. Contact our Urologists:

Mr Grant Russell consults at Capital Urology, 70 Tinakori Rd, Thorndon, Wellington
P: (04) 473 6207
E: grant.russell@urology.gen.nz
EDl: capitalu

Mr Rod Studd consults at Urology Care Wellington, based at the Wakefield Medical Specialist Centre, 99 Rintoul Street, Newtown, Wellington
P: (04) 920 0162
E: info@urologycarewellington.co.nz
EDl: acurityh

Images courtesy of Pacific Radiology

Fibroids – The Easy Culprit

Gynaecologists commonly have conversations with General Practitioners and other specialists about an ultrasound scan finding of uterine fibroids. Women usually have scans for a reason, such as abdominal pain or abnormal uterine bleeding. On face value fibroids may seem an obvious and measurable abnormality to account for the patient’s problems, however in many cases they may be an ‘incidentaloma’. As many as one in four women may have a uterine fibroid. They are even more common in woman of African ancestry¹. In many cases no treatment will be required, while in others they may be the cause of a number of symptoms. Management of fibroids must be individualised and treatment selective.



“They are even more common in woman of African ancestry.”

Who does require treatment?
No practitioner wants to ‘miss the sinister mass’. Fibroids (like any cell) can become malignant. Fibroids are clonal expansions of the smooth muscle of the myometrium, and malignancies are therefore termed leiomyosarcomas.

The odds of malignant transformation are variably quoted between 1:350 – 1:2000. Importantly however, this is based on surgical specimens, so the true population incidence is likely to be very low. Overall we would consider this to be a relatively rare gynaecological malignancy, especially in women under the age of 40. Those requiring treatment can be put in to two groups: those at-risk, and those with symptoms.

So what are the risk factors for malignancy?
Fibroids are uncommon in adolescents and become more common in those approaching menopause, and of course that is often associated with irregular bleeding patterns. Malignancy may be more common in larger fibroids or those with rapid interval growth². If there are concerns (particularly relating to recent-onset pelvic symptoms,

Risk factors for leiomyosarcoma include:

- Advancing age (mean age diagnosis is 60 years old)
- African American ancestry
- Previous pelvic irradiation
- Tamoxifen exposure
- Hereditary leiomyomatosis renal cell cancer syndrome
- Childhood retinoblastoma.

pressure effects, or scan findings of an enlarging mass) referral for specialist assessment is prudent. The finding of a new and enlarging fibroid in a postmenopausal woman is of particular concern.

The other group who will likely benefit from treatment are those with abnormal bleeding, pain or infertility. A clinician must be judicious however with attributing the cause of these presentations to fibroids – they may well be an ‘innocent bystander’.

Fibroids are generally described as being in three locations: subserosal (on the outside of the uterus), intramural (within the muscular wall), or submucosal (impinging on the endometrial cavity). Large subserosal and intramural fibroids may also impinge on the endometrial cavity. Fibroids identifiable in the endometrial cavity may cause heavy and / or prolonged menstrual bleeding. Intramural fibroids may also cause this, but subserosal fibroids generally will not³. Women with intermenstrual and postmenopausal bleeding should have an endometrial assessment.

All women with abnormal uterine bleeding should be considered for endometrial biopsy to investigate for malignancy, especially if it does not respond to simple treatment strategies.

Women with fibroids uncommonly present with pain. Fibroid degeneration is rare, but may be more common in pregnancy when supraphysiological estrogen levels may cause rapid growth. Frequently this will reverse somewhat postpartum, and the fibroid appearance may change, with evidence of cystic degeneration. Pain may also be caused by heavy bleeding (cramping pain with bleeding), or pressure effects on other organs. Torsion of a pedunculated fibroid is also quite uncommon but can cause intermittent severe pain. Pressure effects can include constipation, urinary frequency/nocturia (but not necessarily urgency) and rarely urinary obstruction. Women with heavy, prolonged periods, back pain, and dysmenorrhea may have adenomyosis; an adenomyoma may be confused with a fibroid.

Women with subfertility will commonly have a fibroid found on an ultrasound scan, however only a minority will require treatment, and routine removal will likely lead to increased morbidity and delay in necessary treatments. Submucosal fibroids and those impacting on the endometrial cavity appear to be associated with reduced fertility and an increase in miscarriage rates. Large fibroids may cause problems with ovum (egg) capture, tubal transport and sperm migration. The decision to treat should be based on an absence of other causes of subfertility, other symptoms, and the progress of fertility treatment undertaken thus far⁴. Surgical management may also have impacts on fertility (due to adhesion formation) or obstetric outcomes such as necessity for caesarean section, or rarely uterine rupture in pregnancy.

It is clear that a careful assessment is necessary to determine in which patients symptoms are attributable to the fibroid(s), and in which the fibroids just happen to be there! What treatments are available? Medical treatments are generally poorly effective and only useful in a few selected circumstances. If heavy bleeding is effectively treated by simple measures such as the combined oral contraceptive, cyclical Provera, or a Mirena, it is unlikely the underlying cause of the bleeding is solely the fibroids. Medications (including tranexamic acid) may well be useful to reduce bleeding, however. GnRH analogues such as Lucrin may be recommended to reduce the size of a fibroid in the lead up to surgery; there is evidence this may reduce blood loss. However, due to side effects and issues with bone demineralisation these are not a long-term strategy.

New agents such as Ulipristal, a selective progesterone receptor modulator, have shown promise in overseas trials; whether they become available here remains to be seen.

Treatment is generally surgical. Submucosal fibroids can be removed piecemeal through the cervix with a hysteroscope. Intramural and subserosal fibroids can be removed abdominally both as an open and closed (laparoscopy) procedure. A laparoscopic approach requires advanced training, and the fibroid will require morcellation for removal through small laparoscopic incisions. Morcellation has been the subject of controversy due to a perception of increased risk of dissemination of undiagnosed malignancy, or seeding of fibroid fragments through the abdomen. Recent approaches have focused on the use of a bag to contain the specimen while it is made small enough for removal through a minimal-access incision.

For women not wishing to retain childbearing a hysterectomy may be the most appropriate course of action. Even very large fibroid uteri can be removed laparoscopically. The surgery itself is longer and more difficult, but patient recovery is substantially improved.

References

1. Baird D, Dunson D, Hill M et al. High cumulative incidence of uterine leiomyoma in black and white women: ultrasound evidence. *AJOG* 2003; 188(1): 100
2. Norris H, Taylor H. Mesenchymal tumors of the uterus. *Cancer* 1966; 19(6): 755-66
3. Practice bulletin no 128: diagnosis of abnormal uterine bleeding in reproductive-aged women. Committee on Practice Bulletins – Gynecology. *Obstet Gynecol* 2012; 120(1): 197
4. Kroon B, Johnson N, Chapman et al. Fibroids in infertility – consensus statement from ACCEPT (Australasian CREI Consensus Expert Panel on Trial Evidence. *ANZJOG* 2011; 51(4): 289-95.





“As many as one in four women may have a uterine fibroid.”

- Fibroids are the most common benign tumour of reproductive age women.
- A large number of women with fibroids will be asymptomatic, and no treatment is required. Treatment carries risk.
- A prudent gynaecologist will judiciously operate, and leave small asymptomatic fibroids alone.
- When surgery is considered a minimally invasive option is preferred, but for safety an open procedure may be necessary.
- In many women a hysterectomy may be first-line treatment.



aceso health
COMPREHENSIVE WOMEN'S CARE

P: 04 381 8120
F: 04 381 8121
E: specialists@wakefield.co.nz

Acurity Achieves Certification

Area: Quality. Article written by: Brenda Bruning, Safety, Quality and Risk Manager, ph (04) 920 0131



Acurity Hospitals Achieve ISO 9001 Certification

Acurity Health Group Limited (AHGL) is required to ensure that their hospitals provide safe and reasonable levels of service for our patients as a requirement of the Health and Disability Service (Safety) Act 2001.

Assurance is provided to the Ministry of Health via a scheduled certification audit process which includes a full audit within designated timeframes, as well as a mid-point surveillance audit.

Whilst there is a requirement to complete the certification process, additional accreditation processes are voluntary and not mandated. AHGL takes pride in its mission to care for our patients, and partner with our specialists and funders to improve the health of New Zealanders, alongside our vision of being the partner and provider of choice for private specialist care.

Participating in the voluntary accreditation processes demonstrates our commitment to quality and safety and continuous improvement.



Previously Bowen, Royston and Wakefield all achieved accreditation against standards developed by the Australian Council of Healthcare Standards (ACHS). The Evaluation and Quality Improvement Program (EQulP) was developed to assist healthcare organisations to strive for excellence and quality in their services.

Through the development and maturation of our quality and risk system that has been embedded at all levels of AHGL, a decision was made to transition to the International Organisation for Standardisation (ISO) program, specifically ISO 9001:2015 which sets out the criteria for a quality management system, where over one million companies and organisations in over 170 countries are certified to this standard.

AHGL is proud that Bowen Hospital currently holds EQulP certification and will transition to the ISO program at the time of their next full audit in 2019. This year, both Royston and Wakefield achieved ISO certification, a great achievement given that this was the first year of providing evidence against new standards.



Bowen Icon Cancer Centre Updates



October 2017

Dear General Practitioner

Change of Location to Dr Ken Romeril's Practice


Please be advised that Dr Ken Romeril, Haematologist, will now be providing his medical practice from the new Bowen Icon Cancer Centre.

Dr Romeril has contributed to the Wakefield Specialist Medical Centre over the past 19 years and has played an integral part in developing Haematology services here at Wakefield. His knowledge and contribution has therefore been very much valued by us.

We wish Dr Romeril success in his move of practice and ensure your patients will continue to receive an excellent Haematology service at the Bowen Icon Cancer Centre.

Contact details:
Bowen Icon Cancer Centre
Level B3, 98 Churchill Drive, Crofton Downs, Wellington
P: (04) 896 0200, F: (04) 896 0201
E: referrals@bowen@oncnz.team

Kind regards



Lee White
Practice Manager

Note:
new details

99 Rintoul Street, Newtown, Wellington, PO Box 16-116, Wellington 6242
P 04 381 8120 F 04 381 8121 E specialists@wakefield.co.nz W www.wakefield.co.nz

A Division of:
Acurity
Health Group Limited



Introducing Dr Catherine Barrow

MB ChB FRACP

Medical Oncologist
P: (04) 896 0200
F: (04) 896 0201
E: referrals.bowen@oncnz.team

Speciality: Oncology.
I am a medical oncologist practicing at the Bowen Icon Cancer Centre, 98 Churchill Drive, Crofton Downs, Wellington. I have been a medical oncologist since 2004 working in Melbourne and Auckland before returning to Wellington to work as a medical oncologist in 2006.

I also worked as the Ludwig Institute Cancer Research Fellow in Melbourne and as a research fellow at the Auckland University School of Biological Sciences.

I am actively involved in research and am principal investigator of a number of melanoma clinical trials that have been, or are being conducted at Wellington Hospital including phase I/II study collaborations with the Malaghan Institute and Clinical Trials New Zealand.

I am a member of the Executive Committee for the New Zealand Melanoma Network (MELNET) and a visiting oncologist at the multi-disciplinary Wellington Regional Melanoma Clinic based at the Plastic Surgical Unit at Hutt Hospital.

Special interests: I treat a number of tumour types and have a particular interest in melanoma, lymphoma and breast cancer.

New Consultants



Mr Helge Koeck

Dr.med (Germany),
Vocational Reg MCNZ
Neurosurgeon
P: (04) 381 8120
F: (04) 381 8121
E: specialists@wakefield.co.nz
EDI: acurityh

Speciality: Neurosurgery.
I am a neurosurgeon who consults at the Wakefield Specialist Medical Centre and operates at Wakefield Hospital.

Training: I qualified in medicine from Hamburg University in 1996. I developed a special interest in neuro-oncology with research projects in San Diego (USA) and Zurich (Switzerland). I completed my neurosurgical training in Meiningen, Fulda and Sande, Germany in 2003 and worked as a Consultant for Neurosurgery and Deputy Head of Department in Sande, Germany until 2010. Before moving to New Zealand in 2014 I completed a fellowship in spine surgery in Lingen, Germany.

Special interests: My special interests include spine disorders: cranio-cervical junction instability / deformity, cervical / lumbar spine arthroplasty / instrumentation for degenerative disc disease / deformity, spine trauma. Neuro-oncology: glioma, lateral skull base and neuro-vascular malformations.



Dr Anne-Marie Yardley

MB ChB, MOpth, FRANZCO
Ophthalmologist
P: (04) 472 1375
F: (04) 471 1132
EDI: teyecntr

Speciality: Ophthalmology.
I am a general ophthalmologist and cataract surgeon consulting at The Terrace Eye Centre, and operating at Bowen Hospital.

Training: I completed my medical degree at the University of Auckland in 2003 and went on to complete my postgraduate professional training in ophthalmology in Dunedin, Christchurch and Wellington during which time I also obtained a Master of Ophthalmology from the University of Otago.

Special interests: General ophthalmology, cataract surgery, paediatric ophthalmology and adult strabismus.

I am a Southern Cross Affiliated Provider for cataract surgery, chalazion or tarsal cyst removal, consultations and assessments, fundus photography, intravitreal injections, laser iridoplasty, laser iridotomy, laser trabeculoplasty, macular laser, minor eyelid surgery, optic disc photos, optical coherence tomography (OCT), photocoagulation of the retina or pan retinal laser, pterygium or pinguecula surgery, punctal plug or enlargement, retinal photography, syringing of tear ducts or lacrimal probe, three snip punctoplasty, visual field tests and YAG laser capsulotomy.

Contact Us

GP Conference


BOWEN
HOSPITAL

98 Churchill Drive, Crofton Downs, Wellington 6035
P: (04) 479 2069, F: (04) 479 8520
E: admin@bowen.co.nz




ROYSTON
HOSPITAL

500 Southland Rd, Hastings 4122
P: (06) 873 1111, F: (06) 873 1112
E: hospital@royston.co.nz




WAKEFIELD
HOSPITAL

Florence Street, Newtown, Wellington 6021
P: (04) 381 8100, F: (04) 381 8101
Toll Free: 0800 WAKEFIELD
E: info@wakefield.co.nz



"One of the best run high quality conferences I've been to – thanks"

Connect 2018

Save the date:
25-26 May 2018



"Great meeting, perfect venue and a wide range of interesting speakers"

"A very good conference, money well spent"




Florence Street, Newtown, Wellington 6021
P: (04) 920 0131, F: (04) 381 8102,
E: admin@acurity.co.nz

Newsletter feedback/ideas are welcome:
E: sarah.malone@acurity.co.nz

Health Matters is produced by Acurity Health Group Limited (AHGL). AHGL also cares about the health of the planet – so an environmentally friendly stock and vegetable inks are used. © 2017. All rights reserved to AHGL. This publication contains general information about medical conditions and treatment. You should not rely on this information in place of a visit, call, consultation or the advice of a specialist or other qualified healthcare provider. Content neither indicates nor reflects the views of AHGL. Any research, study, clinical trial, event, news or other item included in this publication is not intended to imply endorsement or approval of it by AHGL. Although we have made a conscientious effort to provide high quality information, AHGL disclaims any implied guarantee about the accuracy, completeness, timeliness or relevance of any information. Please email any feedback to admin@acurity.co.nz