

Health Matters

Primary Aldosteronism: A Common Cause of Hypertension

Dr Richard Carroll



Wakefield Hospital

Area: Endocrinology
Article written by: Dr Richard Carroll,
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Hypertension is defined as a clinic blood pressure $\geq 140/90$ mmHg, or an average ambulatory blood pressure $\geq 135/85$ mmHg¹.

Hypertension alone rarely causes symptoms, but accounts for over nine million adult deaths worldwide annually, predominantly related to resultant cardio or cerebrovascular disease².

Over 30% of New Zealand adults (33% men, 28% women) have hypertension, and the prevalence is higher still in Māori³.

Primary aldosteronism (PA) is by far the most frequently encountered endocrine disorder presenting primarily with hypertension, and accounts for at least six percent of adult hypertension in observational studies⁴. A benign unilateral adrenal adenoma is the most common source of excess aldosterone, although bilateral disease (hyperplasia or nodularity) is also encountered. Contrary to popular belief, hypokalaemia is present in less than 37% of confirmed cases of primary aldosteronism⁵. The likelihood of underlying PA in patients with severe hypertension (BP $>180/110$ mmHg) is at least 13%, and up to 25% in those with resistant hypertension (defined as persistent hypertension despite optimal doses of three or more anti-hypertensive agents).⁴

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Hypertension...
accounts for over
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30%
of New Zealand
adults have
hypertension

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Message from Acurity

Chief Operating Officer's Message
Paul Quayle, Chief Operating Officer, ph (04) 920 0146



Welcome to the Winter edition of Health Matters, the second for 2015. In this issue we are pleased to present Mr Marcus Bisson, Plastic and Reconstructive Surgeon, discussing Dupuytren's Disease along with contributions from Orthopaedic Surgeon Mr Stephen Andrews, Endocrinologist Dr Richard Carroll, and Gastroenterologist and Therapeutic Endoscopist Dr Rees Cameron.

GP Conference

It was our pleasure to host our annual GP Conference at Te Papa in early May. This year's event proved to be very successful, with strong attendance and a wide range of positive feedback from General Practitioners. Among the comments received;

"I very much enjoyed the conference. Great topics very relevant and filled with gold nuggets! Thank you so much!!!!"

"Enjoyed the conference, found it good value and enjoyed the quick fire presentations" and,

"Short to the point talks aimed at us – excellent! As usual an excellent conference".

Please see page 11 to read more about this year's GP Conference.

Save the Date

Next year's conference has been locked in for Friday 6th and Saturday 7th May at Te Papa, Wellington. Please save the date, and keep an eye in future editions of Health Matters and on our website www.acurity.co.nz for further information. We look forward to putting on another excellent event, and to tailoring the content and format in line with feedback received this year.

CME (Educational Events)

I continue to be delighted by strong attendance at our CME meetings. The purpose of these meetings is to introduce you to any new consultants who have recently joined us, to update you on any new areas in their

specialties and also to reinforce some of the basics. Earlier in June the Wakefield Heart Centre cardiologists presented a meeting from within our brand new Catheterisation Laboratory. This provided GPs the unique opportunity of seeing the cath lab in action.

We advertise our CME meetings on our website, the Royal New Zealand College of General Practitioners website and also in NZ Doctor online. If you would like to receive notifications of upcoming CME meetings please email your details to Persephone (pg@acurity.co.nz).

The role of private healthcare

Did you know that private surgical hospitals deliver around 50% of the elective procedures completed each year in New Zealand, around 162,000 procedures per year!

Our Chief Executive, Dr Ian England, recently presented to the NZMA on the major contribution that the private sector brings to healthcare in New Zealand. Alongside the significant contribution to overall surgical volumes, the

private sector invests heavily in modern technology – in fact two of the three 'O-Arm' surgical imaging devices are deployed in private hospitals in New Zealand – including one at our Wakefield Hospital site.

With our ageing population and increasing cost of healthcare delivery, New Zealand's health system remains under extreme pressure with demand outstripping government budgets. Yet, in New Zealand, private health spending is only 17% of total health spend, versus 33% in Australia, and 28% on average across the OECD. We believe that it is imperative that New Zealanders, who are able, should take more responsibility for their healthcare, and one way of doing this is via increased private insurance cover, we continue to advocate for this at the highest levels.

I trust you will enjoy our latest edition of Health Matters.
Happy reading...

Paul Quayle,
Chief Operating Officer,
Acurity Health Group Limited

Primary Aldosteronism: A Common Cause of Hypertension

Continued from page 1

Dr Richard Carroll



Selective screening for PA is indicated in any patient who fulfils the criteria outlined in figure 1, and is performed via a morning blood sample to measure aldosterone, renin, and potassium levels. Whilst concurrent anti-hypertensive medication use can affect aldosterone and/or renin measurements, it is reasonable to perform this screening test without withdrawal of any medication (with the exception of spironolactone). An aldosterone to renin ratio of >30.5 suggests a diagnosis of PA, and these patients should be referred to the local endocrinology service for further investigation (figure 2 – please see over).

A saline suppression test is performed to confirm the biochemical diagnosis.⁶ Anti-hypertensive agents likely to interfere with interpretation of aldosterone/renin levels are withdrawn for up to four weeks prior to this test, and replaced with suitable alternatives. If present, hypokalaemia is corrected. Normal physiology is indicated by suppression of aldosterone following the infusion of 2000ml of normal saline; conversely, PA is confirmed when the aldosterone level remains above 280 pmol/L.

Attempts to localise the source of excess aldosterone can then be undertaken if the patient would be willing to undergo surgery (if indicated). CT imaging of the adrenal glands is performed, but is complemented by adrenal vein sampling in those over 40 years of age given the common finding of incidental

Figure 1

Suggested selection criteria for screening for primary aldosteronism:

	Blood pressure > 160/100 mmHg
	Resistant hypertension (hypertension despite optimal doses of 3 or more agents)
	Hypertension associated with hypokalaemia
	Hypertension and a family history of cardiovascular events at <40 years of age
	Hypertension and an adrenal incidentaloma
Screening performed through the measurement of aldosterone and renin levels on a morning blood sample (preferably after 30 minutes sitting). An aldosterone to renin ratio can then be calculated, with primary aldosteronism suggested by a ratio >30.5.	

adrenal lesions with increasing age⁷. Adrenal vein sampling involves catheterisation and venous sampling of both adrenal veins so that the relative output of each gland can be compared.⁸

Adrenalectomy is offered to those with clear evidence of unilateral aldosterone excess. Normalisation of potassium levels can be expected after surgery. Blood pressure control is generally improved rather than resolved, with the majority of patients remaining on one or two blood pressure agents to achieve normotension.⁹ Medical therapy is used instead in those who are unwilling to undergo surgery or have bilateral disease. The aldosterone antagonist Spironolactone is clearly a preferable choice of agent but is limited by frequent gastrointestinal side effects, as well as gynaecomastia, erectile dysfunction, menstrual irregularities, and postural hypotension.¹⁰

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Cemplicity

Area: Quality
Article written by: Brenda Bruning, Manager Safety Quality and Risk

In April 2015 Acurity implemented an electronic patient experience survey. To date we have received 843 surveys which represent an average return rate of 30%.

Patients are asked to identify the top three things that make the most difference to the quality of their care and treatment, with responses indicating that having confidence in the quality of their care and treatment; communication and information; and being treated with kindness and compassion as the most important.

Patients are able to write comments and we are receiving very detailed, comprehensive qualitative feedback which provides the opportunity to identify areas of improvement in order to ensure patients receive an exceptional service when at an Acurity hospital.

97%

of patients rated the care provided as either excellent or very good



95%

of patients feel that doctors and nurses treat them with compassion and kindness



93%

feel that doctors and nurses listened carefully to patients



94.5%

of having confidence in the doctors and nurses caring for them



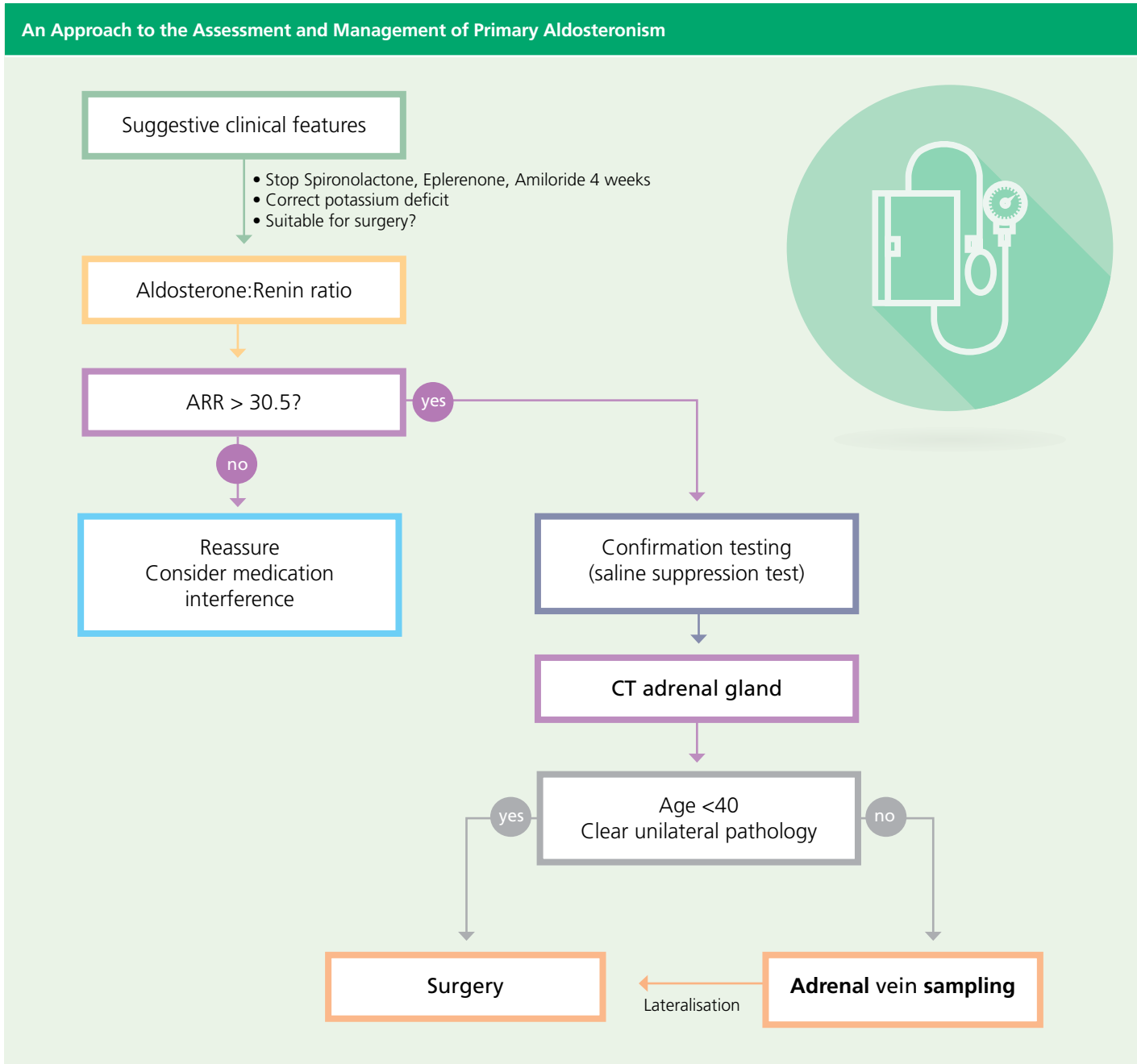
Primary Aldosteronism: A Common Cause of Hypertension

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Dr Richard Carroll



Figure 2



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Upcoming CME's (Educational Events)

Acurity Health Group host a variety of Continuing Medical Education (CME) sessions for GPs throughout the year. Each session is formatted to give you an opportunity to meet consultant physicians and surgeons, receive expert feedback and discuss topics in an interactive environment.

We aim to deliver practical sessions with a primary healthcare focus and learning outcomes based on general practice diagnosis, management and investigation. Consultants are often able to provide updates on the latest research and cutting edge treatments and procedures.

Our sessions are endorsed for CME and MOPS purposes by the RNZCGP. If you would like to suggest a topic of interest or require further information please contact Sarah Malone, Business Development Manager P: 04 920 0158, E: sarah.malone@acurity.co.nz

Upcoming CME's 2015/16					
Date	Speaker	Title	Details	Venue	CME endorsed
29 July 2015 Wednesday	Dr Richard Carroll, Endocrinologist	Current approach to glucose control in type 2 diabetes	When and how to consider an endocrine cause of hypertension	Education Centre, Wakefield Hospital	2 credits
27 August 2015 Thursday	Mr Wicks, General Surgeon	General Surgery – Complications after Surgery	What GPs Need to Know	Education Centre, Wakefield Hospital	2 credits
Date TBC	Marie Verschoor, Clinical Charge Nurse Endoscopy	An Overview of Gastroenterology	Procedures for Registered Nurses	Education Centre, Wakefield Hospital	1 educational point
9 September 2015 Wednesday	Mr John Groom, Gastrointestinal and Colorectal Surgeon/Endoscopist	Gastroenterology in a Nutshell		Waiata House, Masterton	2 credits
15 September 2015 Tuesday	Dr John Wyeth, Gastroenterologist/Endoscopist	Gastroenterology	Upper GI Symptoms and Disease	Seminar Room, Bowen Hospital	2 credits
September 2015 Date TBC	Dr Bertrand Jauffret, General Surgeon and Mr Bernard McEntee, General Surgeon, Colorectal & Laparoscopic	TBA	Colon Cancer Screening	Royston Hospital, Hastings	2 credits
September 2015 Date TBC		TBA	Colon Cancer Screening	East Pier Hotel, Napier	2 credits
21 October 2015 Wednesday	Dr Lupe Taumoepeau, Vascular and Endovascular Surgeon	Vascular	For more details about Dr Taumoepeau, please see p15	Education Centre, Wakefield Hospital	2 credits
18 November 2015 Wednesday	Dr Ken Romeril, Haematologist	Haematology Update		Education Centre, Wakefield Hospital	2 credits
6 & 7 May 2016 Friday & Saturday	Multiple speakers	Connect 2016 – Acurity GP Conference	For enquiries, email connect@acurity.co.nz	Te Papa, Wellington	TBA



For an updated list of CME's visit www.acurity.co.nz and search events.

Dupuytren's Disease: Update on a Historic Condition

Dupuytren's Disease is a very common condition taking its name from a pioneering French Surgeon; Baron Guillaume Dupuytren after he delivered an account of the condition and his treatment for it as one of his "leçons orales" in 1831⁽¹⁾. In fact it had been described before in London and possibly even as early as 1614 by Felix Plater in Switzerland.

It often presents to general practitioners with patient concerns regarding developing lumps in the hand (see Table 1). Early Dupuytren's disease characterised by these isolated nodules with occasional skin tethering or "pits" rarely requires any treatment. The disease is usually painless but occasionally steroid injections into tender or symptomatic nodules can be helpful.

This benign fibroproliferative condition affects the palmar fascia, causing thickening of the involved tissue, most commonly along the ring and little finger rays. As the disease progresses this tissue shortens. It is these tethering "cords" of disease which cause symptomatic permanent flexion contractures of the digits. Patients describe problems with every day activities such as tooth brushing, putting hands in pockets, work and sport activities. Rate of progression can be variable and may influence timing of treatment decisions.

There is clearly a genetic component to the condition with both a racial and familial link as well as some patients displaying aggressive bilateral, early onset disease with ectopic site involvement (termed the Dupuytren's Diathesis). The exact genetics however remain elusive and it is likely to be polygenic with environmental triggers. Many of these classic associations taught in medical school such as epilepsy, alcohol and liver disease are not clear cut in the literature however diabetes, smoking and single episodes of local trauma in the upper limb do appear to be associated with developing the disease⁽²⁾⁽³⁾.

When Should Treatment be Considered?

There are no absolute indications for treatment and the disease itself is not curable despite advances in the cell and molecular biology of the condition. Over the last 180 years the mainstay of treatment has been surgical correction of the contracted digit with Dupuytren himself using a percutaneously placed bistoury to divide tethering cords. Some newer treatments are showing promise but surgical excision of the involved tissue remains the most reliable method of correction particularly with extensive or recurrent disease. Metacarpophalangeal joint contractures are generally easier to correct than proximal interphalangeal joints and thus surgery should be considered earlier for PIPJ involvement eg contractures of 20° to 30°, whilst 40° plus can be tolerated at the MCPJ. The table top test can be useful where treatment is indicated if a patient is unable to place their hand flat on a table palm down. Referral to a specialist hand surgeon should be considered in these above circumstances and if activities are being impacted, if pain is a feature and if there is rapid progression (see Table 2).

Table 1
Differential Diagnosis of Early Dupuytren's
Fibroma
Ganglion
Giant Cell Tumour
Lipoma
Gouty Tophus
Sarcoma
Traumatic Scar Tissue
Sarcoma
Callus

Table 2
Treatment Consideration
PIPJ Contracture > 20
MCPJ Contracture > 30
Fails Tabletop Test
Rapid Progression
Functional Impairment
Symptomatic Nodules
(? For steroid injection)

Treatment Options

The modern standard surgical procedure is a fasciectomy⁽⁴⁾ where the involved ray is opened and macroscopically involved tissue is excised, carefully dissecting this free from and preserving the important anatomy – nerves vessels and tendons. This removes shortened tethering nodules and cords allowing extension of the digit.

There has been a trend towards less invasive interventions over the last few years and simple division of tight cords (fasciotomy) or localised segmental aponeurectomy have become popular particularly in patient with isolated palmar disease and significant comorbidity. Enzymatic dissolution of diseased tissue using collagenase injections is now also popular having been through trials in America and Europe⁽⁵⁾⁽⁶⁾. Xiaflex (clostridium collagenase) is not yet freely licenced in New Zealand but is likely to become available in the near future. An alternative is percutaneous needle fasciotomy but this should be performed by an experienced surgeon with good appreciation of the anatomy.

Radiotherapy has also been shown to be effective but concerns remain regarding the potential longer term effects particularly in younger patients. Steroid injections may slow disease progression but are unlikely to correct established contractures. In advanced, aggressive disease and particularly in recurrences, skin may be involved requiring a dermofaciectomy and full thickness skin graft reconstruction.

All treatment modalities present some potential risks (see Table 3) and options should be fully discussed to select the most suitable treatment and timing for each patient.

Table 3
Potential Complications of Treatment
Bleeding
Infection
Wound Breakdown
Graft Loss
Nerve Damage
Arterial Damage / Vascular Compromise
Failure to Correct Contracture
Swelling and Stiffness
Recurrence
Extension of Disease
Complex Regional Pain Syndrome

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Figure 2
Baron Guillaume Dupuytren
Image source: commons.wikimedia.org/wiki/File:Guillaume_Dupuytren.jpg

Figure 1
Dupuytren's Disease Affecting 3 Rays
Authors own images

How Long will my Joint Replacement Last?

Royston Hospital

Area: Orthopaedics
Article by: Mr Stephen Andrews, Orthopaedic Surgeon, ph (06) 873 1181

Common Mechanisms of Failure of Hip and Knee Replacements and their Clinical Presentation

Total hip and total knee joint replacement surgeries are highly successful in relieving patient's pain, increasing mobility, and improving quality of life. Due to these benefits and our aging population more patients are undergoing these joint surgeries. This in turn has increased the number of patients that may in the future require revision joint surgery.

How frequent is revision hip and knee joint surgery?

On average there are approximately 14,000 primary hip and knee replacements performed annually in New Zealand. By comparison there are around 1700 revisions performed each year with a ratio of 3:1 hips to knees¹.

How long do hip and knee replacements last?

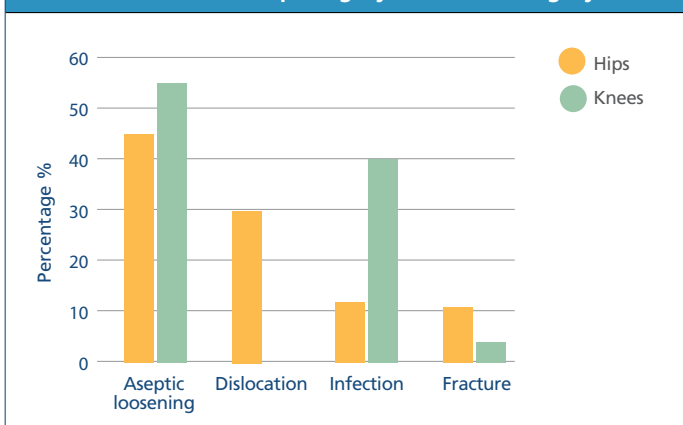
The New Zealand data shows that 14 years after surgery 88% of total hips and 94% of total knees remain in situ¹.

There is however a significant variation in survival when patient age is taken into account. International registry data shows that if you are 75 or older at the time of your hip replacement there is a 90% chance your joint replacement will last more than 20 years. Conversely those under 50 years of age have only a 60% chance their hip will survive more than 20 years².

How do joint replacements fail?

Figure 1.

Reasons for Revision Hip Surgery and Knee Surgery



What causes aseptic loosening?

Aseptic loosening is the most common cause of late joint replacement failure. It is caused by small polyethylene wear particles from the joint. These particles stimulate inflammation and cause osteolysis or the resorption of bone. As bone is eaten away around the prosthesis the joint replacement becomes loose⁶.

Figure 2.



Left hip x-ray showing signs of loosening. The ball of the hip is no longer centered in the socket, indicating polyethylene wear. There is associated osteolysis around the femoral component. A long stem revision component is present on the right.

Can we prevent aseptic loosening?

Recent advances in the manufacturing process of polyethylene are showing promise in reducing the amount of polyethylene wear particles generated. Because of the issues with polyethylene debris several alternate bearing surfaces have been trialed including ceramic on ceramic and metal on metal – each have their own limitations and the new generation of polyethylene remains the most common joint bearing surface^{1,3,4}.

What is the clinical presentation of aseptic loosening?

Clinically patients with loosening develop pain as a result of the micro motion between prosthesis and bone with activity. This pain is classically mechanical in nature, exacerbated by weight bearing and often worse with the first few steps after getting up – so called start up pain. The pain gradually worsens as the prosthesis loosens further⁶.

Other symptoms of a failing joint replacement may include:

- New onset of instability or dislocation
- Swelling
- Crepitus
- Progressive deformity.

What are the x-ray features of a loosening joint replacement?

X-rays show a gradual progression of bone loss around the prosthesis. Other relevant x-ray findings include eccentric polyethylene wear, cyst formation and prosthesis migration.

What is involved with a revision joint replacement?

Revision for aseptic loosening utilises specialised components that have been designed to compensate for the loss of bone around the femur, pelvis and tibia.

A revision can entail a relatively minor procedure such as changing the head or liner, alternately extensive surgery may be required to remove all components and re-implant a revision joint.

In summary the expected longevity of a hip or knee replacement is currently very good. We are continually looking to improve our results and reduce causes of failure. Younger more active patients are at increased risk of wearing out their joint replacement earlier. We are optimistic that newer forms of polyethylene will further improve long term survival by reducing the incidence of aseptic loosening.

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Mr Stephen Andrews



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World First Study for Wellington

Dr Reece Hall



Bowen Hospital | Area: Ophthalmology,
Article written by: Dr Reece Hall, Ophthalmologist, ph (04) 464 0003 or 0800 69 20 20

Capital Vision Research Trust in cooperation with the Lions Clubs of New Zealand is conducting a world first study of an eye disease called Keratoconus.

Known as the Wellington Keratoconus Study (WELKS), it aims to determine the prevalence of keratoconus in Wellington teenagers.

At present there have been no large scale studies in the world on keratoconus in teenagers, yet alone one conducted from a customised van using the latest technology.



WELKS is a completely new enterprise using a customised van as a mobile eye scanning unit to visit schools involved with the study. Year 9 and Year 11 students of participating schools in the Wellington region will have their eyes comprehensively scanned for keratoconus. These scans are quick and painless thanks to the modern hi-tech machines that are used (Pentacam corneal topography). Eye scans can be costly but due to the support of sponsors and donors these scans are able to be offered to all Year 9 and Year 11 students at no cost. Scanning and data collection will all be carried out by Rachel Cox our Ophthalmic Research Technician, with Consultant Ophthalmologist Dr Reece Hall reviewing cases.

“In carrying out the study on keratoconus we will inadvertently also be finding students who have other eye conditions that need attention, or may simply need glasses”
Dr Reece Hall, Consultant Ophthalmologist.

Keratoconus is a progressive disease of the cornea (the clear front part of the eye) that starts in adolescence. If left untreated it can cause blindness and may require corneal transplant surgery to restore vision.

It can also impair learning and performance at school due to poor vision as it often goes undiagnosed until advanced vision loss occurs. However, if caught early, loss of vision is preventable with much more simple and new treatment solutions such as corneal cross-linking.

This research is particularly valuable to New Zealand as keratoconus is thought to be more common in New Zealand and especially in those of Māori and Pacific Island descent. There also appears to be a link between keratoconus and those who suffer from asthma, eczema and allergies. WELKS may highlight the need for a national screening programme for New Zealand school children.

Capital Vision Research Trust is a registered charitable trust with the primary aim of providing scientific and community based research into eye disease and eye treatments. This study is being supported by Professor Tony Wells, Dr Reece Hall, Dr Andrew Logan and Dr Keith Small and the trust patron Kerry Prendergast.

WELKS is generously funded by the Lions Clubs of New Zealand through the Lions Eye Research Charitable Trust, with other contributions from donations and sponsorship including from Bowen Hospital. For more information on the study please contact the Study Coordinator, Janet Paget at Capital Vision Research Trust, ph 04 979 8884, e: research@capitalvision.org.nz

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Connect 2015

Over a glorious two days in May, the 17th Annual Acurity GP Conference: at Te Papa, provided a platform for the GP community to learn and discuss trends and developments in healthcare both here and globally.

More than thirty speakers shared their specialist knowledge in Cardiovascular Health, Oncology, Orthopaedics, Women's Health and Technology. A variety of workshops, quick-fire presentations, plenary sessions and practical demonstrations, ensured there was plenty on offer to reinforce the basics, introduce recent advances and assist with diagnosis and treatment options. For many the conference provided an opportunity to connect with peers and medical experts. For others the highlights were the “interesting topics, practical advice and relevant information”. Extremely popular were the lightning talks sessions described as “brilliant, simple and very applicable”.

This has been one of our most successful conferences yet. Thank you to everyone who took part and contributed in some way. For those who attended, the work you carry out is of enormous importance to our community; not only is it widely needed but it is greatly appreciated.

With your feedback and suggestions we have some exciting developments in progress for next year and look forward to seeing you on 6th and 7th May 2016.

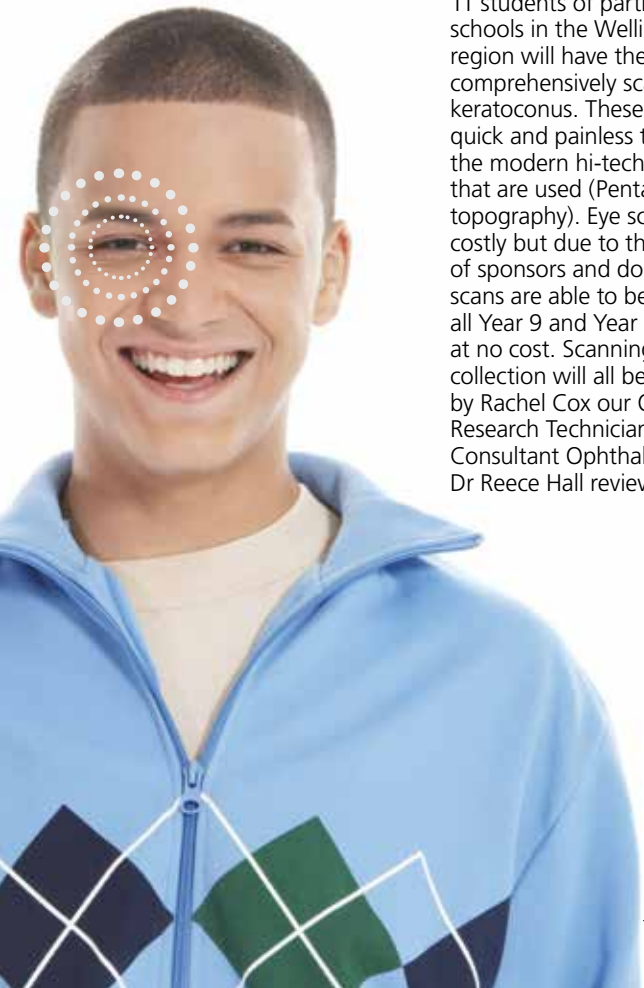
Save the dates

Connect 2016,
Te Papa,
6 & 7 May 2016

MAY 2016

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Please check our website for updates
www.acurity.co.nz



Connect 2015 – Special thanks

Special thanks to the following speakers:

Dr Malcolm Abernethy, Interventional Cardiologist
 Kim Arcus, Manager Heart Healthcare, Heart Foundation
 Matt Beal, Hand Therapist
 Mr Nick Bedford, Gynaecologist
 Liz Childs, Pelvic Health Physiotherapist
 Mr Jon Cleary, Orthopaedic Surgeon
 Mr Gareth Coulter, Orthopaedic Surgeon
 Dr Trevor FitzJohn, Diagnostic and Interventional Radiologist
 Rodney Ford, Physiotherapist
 Lesley Gray, Senior Lecturer, Academic Convenor, Department of Primary Health Care and General Practice, University of Otago
 Dr Sam Hazledine, Doctor, Entrepreneur, Athlete, Father
 Mr Chris Hoffman, Orthopaedic Surgeon
 Mr Martin Hunn, Neurosurgeon
 Mr Grant Kiddle, Orthopaedic Surgeon
 Mrs Hanifa Koya, Gynaecologist
 Mr Fali Langdana, Gynaecologist
 Dr Mark Leadbitter, Diagnostic and Interventional Radiologist
 Steven Livingston, ACC Case Manager
 Mr Simon McDowell, Gynaecologist
 Dr Richard Medicott, General Practitioner
 Dr Beth Messenger, Locality Medical Adviser
 Dr Helen Moriarty, Senior Lecturer, Department of Primary Health Care and General Practice, University of Otago
 Dr Sandy Morris, General Practitioner
 Dr Anne O'Donnell, Oncologist
 Sue Paton, Principal Advisor Addictions, Health Promotion Agency
 Dr Anil Ranchord, Interventional Cardiologist
 Sanjeewa Samaraweera, Medtech Representative
 Dr Maria Stubbe, Senior Lecturer, Department of Primary Health Care and General Practice, University of Otago
 Mr Rod Studd, Urologist
 Professor Alan Thurston, Orthopaedic Surgeon
 Dr Matthew Webber, Cardiologist/Electro-physiologist
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Paul Quayle, Acuity Chief Operating Officer, Dorothy Shaw, Bowen Hospital General Manager, Denise Primrose, Royston Hospital General Manager, Sean Izzard, Southern Cross, and Mr Chris Hoffman, Orthopaedic Surgeon, TBI Health

(Left to right) Kristine Shand, Charge Cardiac Physiologist, Sue Pankhurst, Echo Cardiographer and Dr Anil Ranchord, Interventional Cardiologist, Wakefield Heart Centre

"EXCELLENT – Thank you again!"

Sue Pullon, Associate Professor and Head of Department, Primary Health Care and General Practice, University of Otago, Wellington (centre) with GPs

Mr John Groom, Gastrointestinal and Colorectal Surgeon/Endoscopist (left), GP (centre) and Dr John Wyeth, Gastroenterologist/Endoscopist

ASB Representatives with Deirdre Parag, Acuity Group Finance Manager (far right)

"Lightning talks excellent"

"I very much enjoyed the conference. Great topics very relevant and filled with gold nuggets! Thank you so much!"

"Many thanks for the well organised and full on, exciting conference with many practical topics"

Sarah Malone, Acuity Business Development Manager, Matt Beal, Hand Therapist

Dr Matt Webber, Cardiologist/Electrophysiologist (right) and GP

Acuity staff – Debbie, Karn & Persephone

Connect 2015

"Good value
and a worthwhile
two days!"



GP (left), Mr Chris Hoffman, Orthopaedic Surgeon, TBI Health (centre),
Dr Marion Leighton, Specialist General Physician (right)



"Enjoyed the
conference, found it
good value and enjoyed
the quick fire
presentations"



Dr Mark Leadbitter, Interventional Radiologist, Pacific Radiology (left),
Dr Guy Jenner, GP, (centre) and Marg Jenner, Wakefield Specialist
Medical Centre Practice Manager (right)

"Very well run,
lovely venue,
feel good
conference"

"Well organised,
thank you"

Specialist Updates



SPECIALIST VEIN HEALTH

Call 04 389 4999
for all inquiries

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**WAKEFIELD HOSPITAL
SPECIALIST CENTRE**
99 Rintoul Street
P O Box 7623
Newtown
Wellington 6242

EDI Healthlink: veinspec

Dear General Practitioners

Dr Lupe Taumoepeau – MBChB, FRACS (Vascular)
Mr Richard Evans – MBChB, FRACS (GenSurg), FRACS (Vascular)
Mr JK Wicks – MBChB, FRACS (GenSurg), FRACS (Vascular)

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FOR REFERRALS PLEASE USE THE NEW DETAILS LISTED BELOW:

Wakefield Specialist Medical Centre
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We also have monthly clinics in Lower Hutt, Kapiti and Nelson.

Thank you for your support.

Yours sincerely

Lupe Taumoepeau, Richard Evans, JK Wicks
Vascular and Endovascular Surgeons

SPECIALIST VEIN HEALTH

New Details

New Techniques – Water-assisted ‘Underwater’ Colonoscopy

Wakefield Hospital

Area: Gastroenterology.
Article written by: Dr Rees Cameron, Gastroenterologist and Therapeutic Endoscopist, ph (04) 381 8110



Figure 1: Distension of a normally 80-90cm long colon to >150cm by gas insufflation at CT colonography, similar to what happens during traditional gas colonoscopy – the reason for discomfort is obvious.



Figure 2: The terminal ileum underwater – the ‘coral reef’ appearance

Since its beginnings more than 40 years ago, colonoscopy has involved inflating the large bowel with air, and more recently CO₂, to open it up and provide views of the interior. The introduction of gas into the colonic lumen, however, causes stretching of the wall which leads to discomfort or pain, and lengthening of the bowel, which increases insertion distance and creates sharper corners for the colonoscope to traverse (Figure 1). In patients with irritable bowel syndrome who have increased sensitivity to stretch and pain, this can create significant comfort problems at the time of colonoscopy.

The use of water to open the bowel instead has been noted in the endoscopic literature since 2007, facilitated by newer colonoscopes with an irrigating channel and the development of foot-operated

water pumps. Water allows opening of the colonic lumen without stretching the wall or lengthening the colon, and straightens the sigmoid colon which is usually the most difficult to traverse.

Initially employed as a means of reducing pain in patients with irritable bowel syndrome, a broader range of benefits from this method has now become apparent. Water-assisted colonoscopy significantly reduces sedation requirements in colonoscopy (and in my experience two thirds of patients require no sedation at all), increases the percentage completion rates of colonoscopy (reducing the need for a second procedure or CT colonography), and significantly increases the adenoma polyp detection rate which is the primary measure of colonoscopy quality and its ability to reduce colorectal cancer risk.

So how does water increase the detection of polyps?

First, endoscopy in water gives a 4/3 magnification over air and eliminates the obscuring shiny

air-water mucosal interface, improving visualisation of subtle lesions. Second, when the bowel wall is stretched by gas, so is the polyp, and if it is a reasonably flat polyp then it may become very difficult to see when it is thinned out. This is important because the most important type of polyp implicated in the development of interval cancers (cancers that occur reasonably shortly after a colonoscopy, probably due to missed pathology at that colonoscopy) is the serrated polyp, which is usually very flat. Under water, even flat polyps remain bunched up and project into the lumen making them easy to spot (Figures 3 and 4).

The lack of wall stretch and thinning under water gives another advantage as well: the submucosa layer remains thick

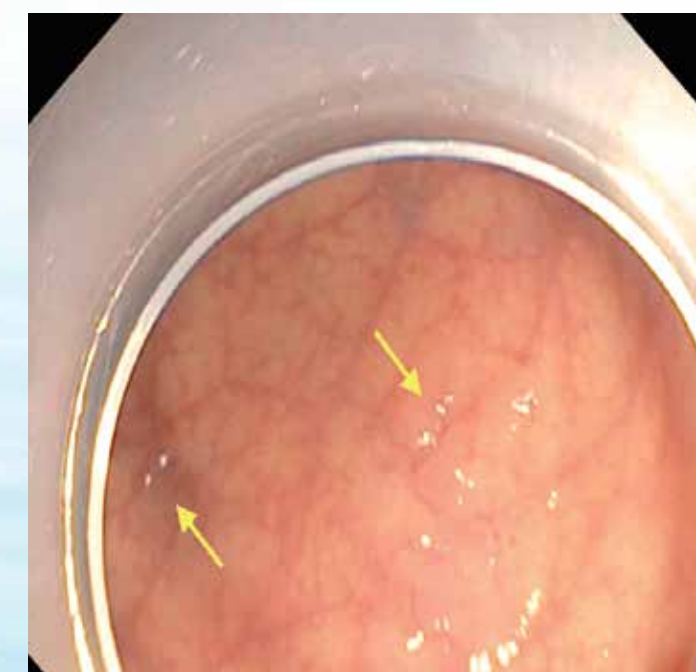


Figure 3: Two inconspicuous and easily missed polyps in an air-filled colon

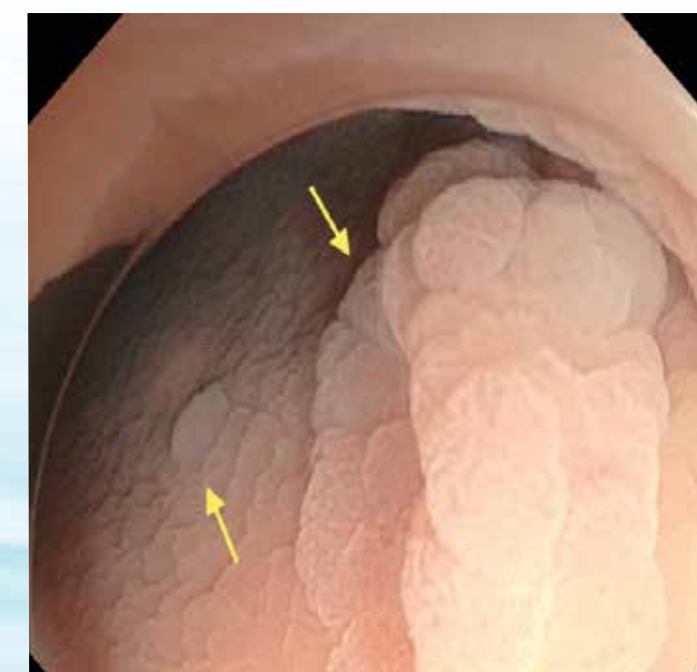


Figure 4: The same two polyps as in Figure 3 easily seen underwater

and allows removal of large polyps without injection of a protective cushion underneath. This technique of ‘underwater EMR’ makes removal of large polyps anywhere in the colon safe and easy – there should be no need for surgical resection of any non-cancerous colonic polyp. Last but not least, patients prefer water-assisted colonoscopy.

Since my introduction of this technique to Wellington and Wakefield Hospitals in 2012, there has been universal preference of water-assisted colonoscopy in patients who have had prior gas-insufflation procedures, with reduced sedation requirements, and reduced procedural and post-procedural discomfort.

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Dr Rees Cameron



Rees Cameron consults at the Wakefield Gastroenterology Centre, Rintoul Street entrance, Newtown, Wellington.

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Healthlink: gstwrkfd

Summary

The advantages of water-assisted colonoscopy:

- Easier colonoscopies
- Improved patient comfort and reduced sedation requirement
- Improved polyp detection
- Ability to perform ‘underwater EMR’ – do not send benign polyps to surgery.

New Consultants

Acurity Health welcomes the following consultants to our Royston and Wakefield hospitals. Please contact them directly if you would like more information about their specialties.



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Dr Tom Boswell

BHB, MBChB, FRACP

Gastroenterologist

P: 06 878 8109
E: thomas.boswell@hawkesbaydhb.govt.nz

Tom practices at Royston Hospital.

Specialty

Gastroenterology

Training

Tom trained as a Gastroenterologist and General Physician in New Zealand under the Royal Australasian College of Physicians. An Overseas Fellowship was undertaken in Hepatology at the Scottish Liver Transplant Unit, Royal Infirmary of Edinburgh and in Inflammatory Bowel disease at Edinburgh's Western General Hospital.

Special interests

- Coeliac disease
- Endoscopy (Gastro)
- Hepatology
- Upper GI (Gastro)
- Lower GI (Gastro)
- IBD
- IBS.

Tom has a special interest in Hepatology, Inflammatory Bowel Disease and Endoscopy.



Dr Bertrand Jauffret

AIHP, ACCA, DES General Surgery, Paris – France

General Surgeon

P: 06 873 1111
F: 06 873 1165
E: bertrandjauffret@hotmail.com

Bertrand consults at the Royston Centre, 325 Prospect Road, Hastings and operates at Royston Hospital.

Specialty

General Surgery

Training

- MD: University Paris VI 1986.
- Surgical Training:
 - Paris – Assistance Public Hospitals
 - DES – Visceral Surgery 1992
 - DES – General Surgeon 1998.

Special interests

- Upper and Lower GI Surgery
- Endoscopy
- Laparoscopic Surgery.

Dr Jauffret and Mr McEntee present a CME meeting in September. See page 5 for details.



Mr Bernard McEntee

BHB, MBChB, FRACS

General Surgeon:

Colorectal & Laparoscopic

P: 06 873 1160
F: 06 873 1161
E: healingsteelmed@gmail.com

Bernard consults at the Royston Centre, 325 Prospect Road, Hastings and operates at Royston Hospital.

Specialty

General Surgery

Training

- 2014: Post Fellowship training in Colorectal Surgery, Princess Alexandra Hospital, Brisbane.
- 2013: Post Fellowship training in Colorectal Surgery, Waikato Hospital.
- 2012: Obtained Fellowship of the Royal Australasian College of Surgeons as a General Surgeon.

Special interests

- Colorectal surgery
- Laparoscopic surgery.

Bernard has a special interest in all benign and malignant conditions affecting the colon, rectum and anus.

Background

Bernard grew up in Hawke's Bay, attending Havelock North High School. He worked at Hawke's Bay Hospital between 2005-2007 and 2010 and returned again in 2015 as a Consultant General Surgeon specialising in Colorectal and Laparoscopic Surgery. He is married with three young children.



Dr Darren Hooks

PhD, MBChB, Dip (Cardiac EP), FRACP

Cardiologist/

Electro-physiologist

P: 04 381 8115
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E: heart@whc.co.nz

Darren consults at the Wakefield Heart Centre, Rintoul Street, Newtown, Wellington.

Specialty

Cardiology

Training

- Completed a PhD in cardiac electro-physiology in 2002
- Trained in cardiology in Auckland, gaining FRACP in 2012
- Undertook sub-specialist training in cardiac electro-physiology in Christchurch (2013) and Bordeaux (2014).

Special interests

- Cardiac Electrophysiology including ablation of SVT, atrial fibrillation, ventricular tachycardia.



Dr Lupe Taumoepeau

MBChB (Auckland), FRACS (Vascular)

Vascular and

Endovascular Surgeon

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Lupe is a Vascular and Endovascular Surgeon consulting at Specialist Vein Health (which is based in Wakefield Hospital, 30 Florence Street, Newtown, Wellington).

Specialty

Vascular and Endovascular

Training

Lupe completed medical school in Auckland and vascular surgical training in Auckland, Wellington, Hamilton and Brisbane.

Special interests

- Carotid Artery disease
- Minimally invasive aortic surgery
- Peripheral vascular disease and endovascular treatment
- Diabetic foot disease
- Endovenous treatment
- Renal transplant.

Background

Lupe is of Tongan descent and was born and raised in Auckland, New Zealand. She is the first New Zealand trained female Vascular Surgeon.

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