

Health Matters

Diverticular Disease – A Modern Time Disease

Mr Ali R Shekouh



Bowen Hospital and
Wakefield Hospital

Area: Colorectal and General Surgery.
Mr Ali R Shekouh, Consultant Colorectal
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Diverticular disease is a benign disease of the colon – termed a ‘modern’ disease attributed to our diet and lifestyle. Since the 19th century – the food we eat has become progressively more refined – the lack of fibre contributing to the development of this condition in modern society.

Diverticulosis is found in increasing frequency with advancing age (~10% in 50 years old compared to ~80% in > 80 years old).¹ There is a distinct difference in the location of the diverticulæ between Caucasian and Asian patients. In Caucasian patients, 85% of the diverticulæ are present mainly in the left colon – the sigmoid and/or descending.¹ By contrast, in Asian patients, up to 70% the diverticulæ occur more commonly in the right colon.²

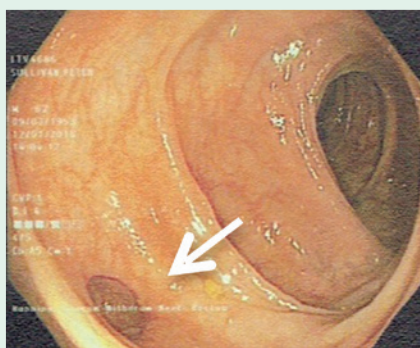


Figure 1
Endoscopic view of a diverticulum

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Save the dates

Acurity GP Conference
19 & 20 May 2017



Message from Acurity Health Group

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



Welcome to Edition 15 of Health Matters, the second of our issues for 2016. Inside you will find a feature on our recent Acurity GP Conference – “Connect 2016” along with a range of articles from our consultants updating you on new techniques and information from their specialties. We are also proud to introduce a number of new consultants joining our hospitals.

GP Conference – 2016

I hope you enjoyed our conference this year and found it to be both valuable and interesting. The feedback received has been outstanding and I sincerely thank you for making the time to complete the evaluation forms. We place great value on all feedback and strive to improve our conference year on year to bring you an ever improving event than ever before. I'd also like to take the

opportunity to once again thank our speakers, sponsors and exhibitors – without them we wouldn't be able to put on such a comprehensive event.

Congratulations to all of our prize winners, and sincere thanks to our sponsors and exhibitors for supplying these prizes. Special congratulations to Dr Marta Kroo of Barraud Street Health Centre in Dannevirke, who won the Acurity Health Group Practice Prize of a surgical bed.



Save the Date – 2017

Next year's conference, Connect 2017, has been booked for Friday 19th and Saturday 20th May at Te Papa. Please keep an eye out in future editions of Health Matters and on our website for further information. www.acurity.co.nz

Oncology

We are delighted to announce that Acurity Health are partnering with Icon Group to develop a comprehensive private Cancer Care facility in Wellington. This will be the first comprehensive private cancer centre in Wellington so we are understandably very excited about this. We expect to commence medical oncology services prior to Christmas, with radiation oncology services following as an early part of the upcoming rebuild of Wakefield.

CME (Continuing Medical Education)

We have a strong CME programme through to the end of the year – please refer to page 5 for further details. I do hope you take the opportunity to attend these valuable sessions. Acurity CMEs are advertised on our website, the RNZCGP website and on NZ Doctor online as soon as they are secured with the speaker and venue. We also send an email inviting you to attend, if you are not receiving these email notifications please email pg@acurity.co.nz to be added to the database. This database is solely for this reason and is not distributed to any other parties nor used for any other purpose.

As always happy reading.

Paul Quayle
Paul Quayle,
Chief Operating Officer,
Acurity Health Group Ltd

Diverticular Disease – A Modern Time Disease

Continued from page 1

Mr Ali R Shekouh



Diverticular disease comprise one or more of the following trilogy:

- Diverticulosis
- Inflammation for a diverticulum or diverticulae – diverticulitis
- Bleeding of a diverticulum or diverticulae.

The contributing causes of diverticular disease are changes in colonic wall resistance and colonic transit time/motility. As mentioned previously, low dietary fibre intake is an important lifestyle factor attributing to this disease. Genetic susceptibility has been found with stronger correlation in monozygotic twins when compared with dizygotic twins.³ Obesity, advancing age and lack of

exercise are also risk factors for developing diverticular disease.

Approximately 20% of patients with diverticulosis develop acute diverticulitis.⁴ Patients who become symptomatic with acute diverticulitis – they commonly present with left sided abdominal pain with or without the associated systemic symptoms such as loss of appetite, pyrexia, and tachycardia.

After excluding the other possible acute causes, see Table 1, an initial management pathway for patients with suspected acute diverticulitis can be followed, see Table 2.

- POSSIBLE DIFFERENTIAL DIAGNOSIS FOR DIVERTICULITIS**
- Bowel obstruction
 - Irritable bowel syndrome
 - Appendicitis
 - Inflammatory bowel disease
 - Ischemic bowel
 - Neoplastic
 - Gynaecological disorders
 - Urinary tract infection

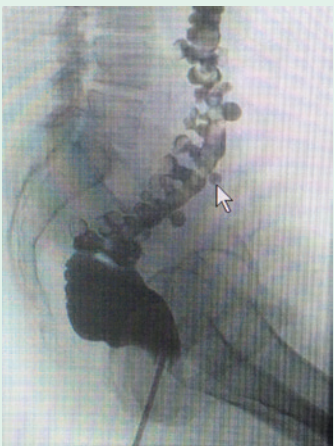
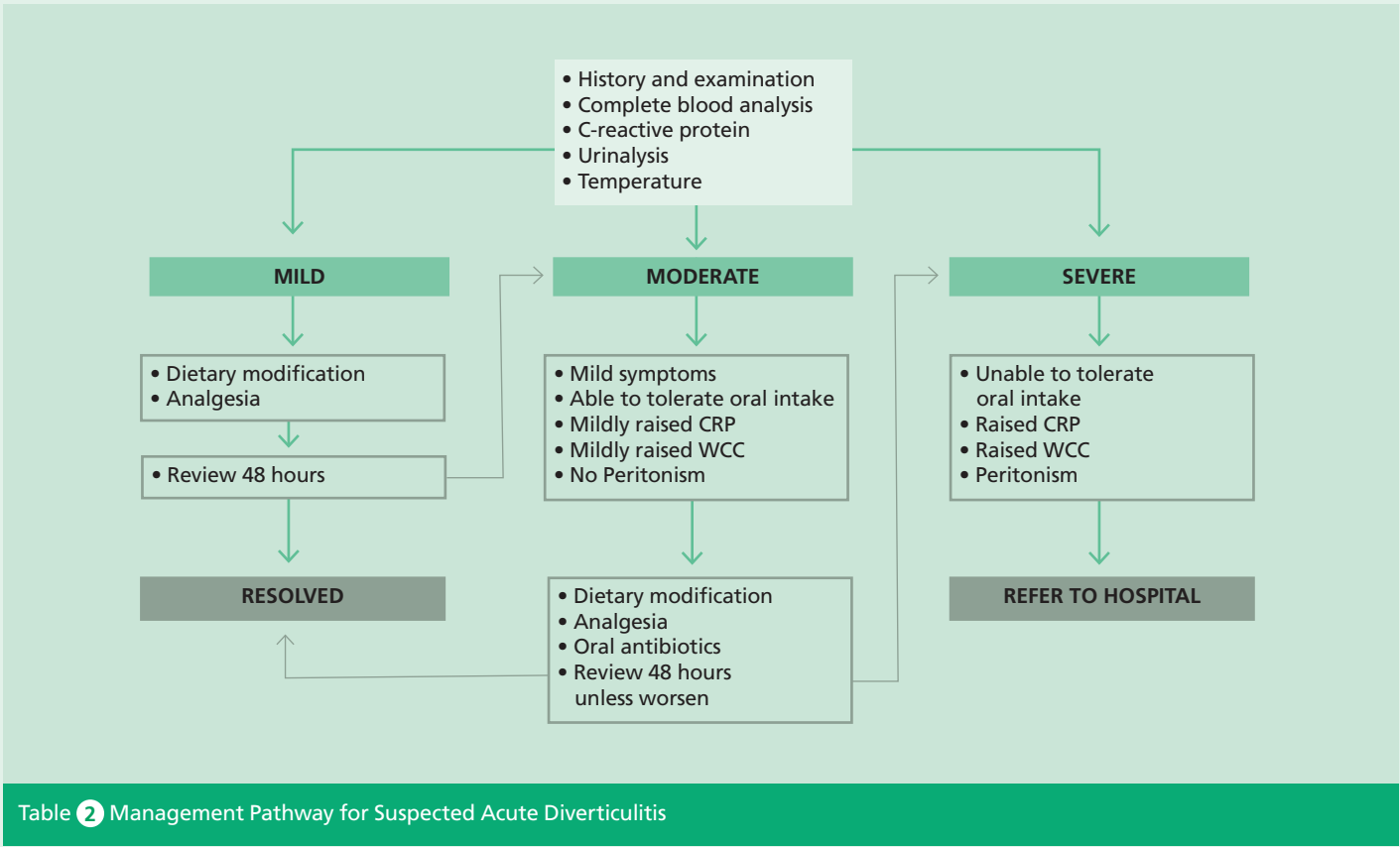


Table 1 Differential diagnosis for acute diverticulitis

Figure 2 Radiological image of sigmoid diverticulae



Continued on page 4

Diverticular Disease – A Modern Time Disease

Continued from page 3

Mr Ali R Shekouh



Mr Shekouh is presenting a CME meeting on Tuesday 20 September, 6.30pm at Bowen Hospital. To register, email: pg@acurity.co.nz

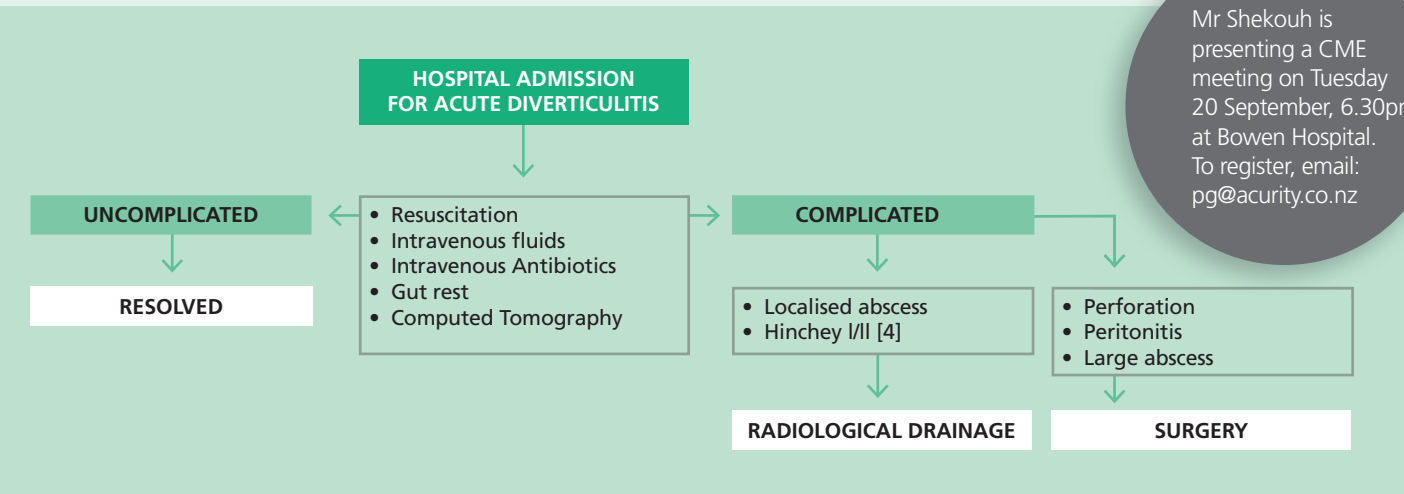


Table 3 Outcome of Hospital Admitted Acute Diverticulitis Patients

Diverticulitis can be subdivided into:

- Uncomplicated diverticulitis (75% of cases)
- Complicated diverticulitis (25% of cases) – with abscess formation, see Figure 3, fistulae, stricture, perforation and sepsis.

The clinical management and outcomes deferring vastly on which category the patient fall into, see Table 3.

In addition, there is a subgroup of patients who develop chronic long term debilitating complications of diverticular disease – fistulae (colovesical, colovaginal, enterocolic), colonic stricture or bleeding. In these patients, there will be a need to further investigate to exclude any other pathology such as inflammatory bowel disease and malignancy.⁶

Follow up investigations include colonoscopy or CT colonography, urological investigations (such as cystoscopy). Treatment to resolve the chronic consequences of this disease would involve surgery – laparoscopic or open resection with/out primary anastomosis and/or the possibility of stoma formation. In summary, diverticular disease, in the majority of patients, is asymptomatic and does not affect the normal lifestyle of those involved. However, in the minority affected by the acute or chronic complications – surgical resection may be required to remove the diseased segment of the colon with re-establishment of continuity where possible. Currently, a prospective study is being carried out at Wellington Regional Hospital to establish a cohesive management pathway for diverticulitis in Wellington.

References

1. Ferzoco LB, Raptopoulos V, Silen W. Acute diverticulitis. N Engl J Med. 1998; 338(21):1521-1526
 2. Lee IK, Kim SH, Lee YS, Kim HJ, Lee SK, Kang WK, et al. Diverticulitis of the right colon: tips for preoperative diagnosis and treatment strategy. J Korean Soc Coloproctol. 2007; 23:223-231
 3. Granlund J, Svensson T, Olén O, et al. The genetic influence on diverticula disease – a twin study. Aliment Pharmacol Ther 2012; 35: 1103-1107
 4. Heise CP. Epidemiology and pathogenesis of diverticular disease. J Gastrointest Surg. 2008; 12(8):1309-1
 5. Hinchey EJ, Schaaf PG, Richards GK. Treatment of perforated diverticular disease of the colon. Adv Surg. 1979;12: 85-109
 6. King DW, Lubowski DZ, Armstrong AS. Sigmoid stricture at colonoscopy – an indication for surgery. Int J Colorectal Dis 1990;5(3):161-3
- * Images & tables: author's own.

For all appointments (including Wakefield Hospital Satellite Clinic): Bowen Gastroenterology Centre P: (04) 479 8261 F: (04) 479 9084 E: endo@bowen.co.nz Wakefield Hospital – Satellite clinic – once a month

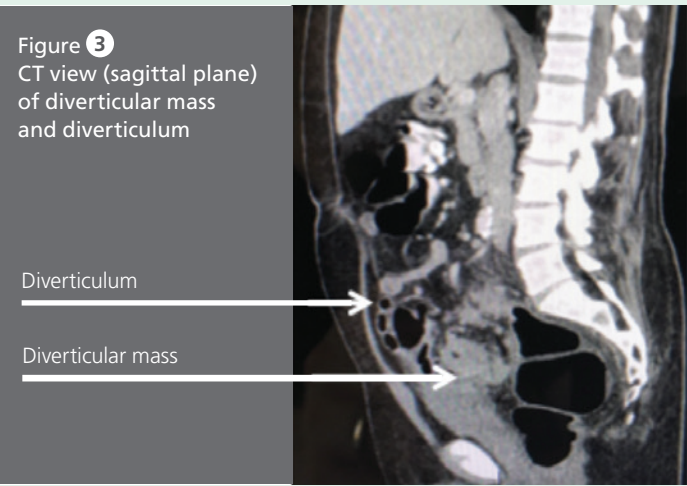


Figure 3 CT view (sagittal plane) of diverticular mass and diverticulum

Upcoming CME Meetings

Acurity Health Group is delighted to host a variety of Continuing Medical Education (CME) sessions for GPs throughout this year.

Upcoming CME Meetings – 2016					
Date	Speaker	Speciality	Topic/Details	Venue	CME endorsed
3 August Wednesday	Mr Kim Broome, Urologist	Urology	Lower Urinary Tract Symptoms	Royston Hospital, Seminar Room	2 credits
10 August Wednesday	Mr Kim Broome, Urologist	Urology	Lower Urinary Tract Symptoms	East Pier Hotel, Napier	2 credits
11 August Thursday	Dr Andrew Davies, Respiratory and Sleep Physician	Respiratory and Sleep	Sleep Disorders	Bowen Hospital, Seminar Room	2 credits
24 August Wednesday	Mr John Groom, Gastrointestinal and Colorectal Surgeon / Endoscopist	Gastroenterology	The Bottom Half of the Body	Bowen Hospital, Seminar Room	2 credits
7 September Wednesday	Mr Albert Lo, Vascular Surgeon	Vascular	To be advised	Royston Hospital, Seminar Room	2 credits
14 September Wednesday	Mr Albert Lo, Vascular Surgeon	Vascular	To be advised	East Pier Hotel, Napier	2 credits
20 September Tuesday	Mr Ali Shekouh, Consultant General and Colorectal Surgeon	General Surgery	Benign Perianal Conditions – The Proverbial Pain in the Butt	Bowen Hospital, Seminar Room	2 credits
12 October Wednesday	Dr Alex Popadich, General Surgeon	General Surgery	Breast Disease and DCIS – What's New?	Wakefield Hospital, Education Centre	2 credits
19 October Wednesday	Dr Lupe Taumoepeau, Vascular and Endovascular Surgeon	Vascular	Vascular Catastrophes – Can't miss diagnoses	Kapiti Lindale Conference Centre, Paraparaumu	2 credits
	Mr J. Kes Wickremesekera, Vascular and Endovascular Surgeon		Vascular High Risk Patient Engagement Programme		
	Mr Richard Evans, Vascular and Endovascular Surgeon		Cosmetic Vascular Surgery		
2 November Wednesday	Dr Ian Wilson, Gastroenterologist	Gastroenterology	Diagnostic Dilemmas and Clinical Cases	Wakefield Hospital, Education Centre	2 credits
3 November Thursday	Wakefield Heart Centre, Cardiologists	Cardiology	To be advised	Kapiti Lindale Conference Centre, Paraparaumu	2 credits

To register please email Persephone pg@acurity.co.nz

Visit www.acurity.co.nz to keep up to date with educational events at Acurity.



Update on Atrial Fibrillation

Dr Matthew Webber & Dr Darren Hooks (far right)



Wakefield Hospital

Area: Cardiology. Article jointly written by: Dr Matthew Webber and Dr Darren Hooks, Cardiologist/Electro-physiologists, ph (04) 381 8115

The prevalence of atrial fibrillation (AF) in New Zealand is increasing, in part reflecting the ageing population. The individualised management of AF covers a spectrum from simple lifestyle measures, to complex interventions.

When seeing a patient with new AF, it is important to remember that development of AF is the end-point of many pathological processes. In much the same way that iron deficiency should prompt a search for the underlying cause, AF is often not the end diagnosis. New AF should trigger a detailed history and examination, and for most, referral for echocardiogram. While a minority of patients may have “lone” AF, with no identifiable cause other than, perhaps, a genetic predisposition, in many the arrhythmia reflects underlying pathology, for instance, hypertension, obstructive sleep apnoea, obesity, diabetes, or alcohol/substance excess. AF may also reflect valvular pathology, or cardiomyopathy of any cause, including ischaemic, dilated, or hypertrophic. Rarely, infiltrative disease such as cardiac sarcoid can manifest first as AF.

The main issue for those living with AF is the impact on *quality* of life. AF is also a marker for shorter life-span, yet, we know from two landmark trials that adoption of a “rhythm control” strategy does not, in general, prolong life or reduce the risk of stroke.^{1,2} A decision to restore and maintain sinus rhythm therefore rests on symptoms. There is marked variation in how people perceive AF. Most will describe rapid palpitations, breathlessness, and some reduction in exercise capacity. For many the symptoms are more subtle, to the extent that the onset and duration

of AF is uncertain. Younger patients tend to tolerate the rhythm less well, in part due to a propensity for more rapid ventricular rates. For some, AF interferes dramatically with the ability to work, sleep, or exercise. For these patients, timely cardioversion is important, because as the duration of AF lengthens, the left atrium undergoes structural and electrical adaptations that make durable restoration of sinus rhythm less likely. Most often, cardioversion should be accompanied by treatment with an anti-arrhythmic to prevent recurrence. In NZ, flecainide or sotalol are the most commonly prescribed. Both have important ventricular pro-arrhythmic risks in certain groups, and should only be commenced under specialist guidance.

In the most symptomatic of patients, in whom anti-arrhythmics have failed to prevent further episodes, there should be consideration of referral for pulmonary vein isolation (PVI). In the late 1990s, a team of French Cardiologists in Bordeaux recognised that AF was often triggered from ectopic beats arising from the pulmonary veins.³ These veins have a sleeve of myocardium, extending from the left atrium some 2cm along the vein. The veins can acquire automatic pacemaker-like function and trigger AF. Pulmonary vein isolation is performed with catheters entering from the right femoral vein. Radiofrequency ablation is applied around the

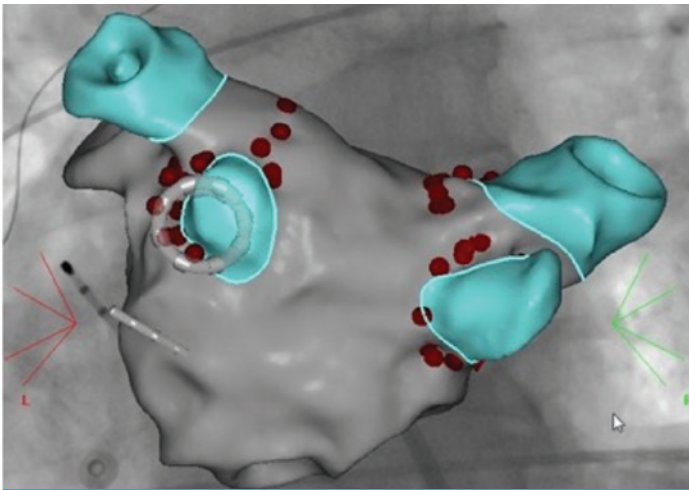


Figure: 3D reconstruction of left atrium using magnetic navigation (posterior view). Pulmonary veins are coloured in blue. Ablation points are shown at the antrum to the pulmonary veins as red dots.

veins to electrically isolate them from the left atrium. A powerful electro-magnet housed under the patient table generates a 3D magnetic field, and the catheters used for ablation contain tiny magnetic sensors which allow 3D navigation within the left atrium, all from a percutaneous approach. This rather “space-age” procedure is now a standard of care for highly symptomatic patients with AF. In 2015, 50 PVI procedures were performed between Wellington and Wakefield Hospitals. The procedure is imperfect, with a 2/3 chance of freedom from symptomatic AF from a single procedure, rising to ~80% if a second procedure is performed for patients with recurrence.⁴ Procedural failure relates to both electrical reconnection of the pulmonary veins over time, and in some patients, non-pulmonary vein triggers. However, for patients with debilitating AF, PVI can play a vital role in symptom management.

References

1. AFFIRM Investigators. A comparison of rate Control and rhythm control in patients with atrial fibrillation. 2002. NEJM 347:1825-1833
 2. Gelder V et al. A comparison of rate control versus rhythm control in patients with recurrent persistent atrial fibrillation. 2002. NEJM 347:1834-1840
 3. Haissaguerre M et al. Spontaneous initiation of atrial fibrillation by ectopic beats originating in the pulmonary veins. 1998. NEJM 339:659-666
 4. Kuck K-H et al. Cryoballoon or radiofrequency ablation for paroxysmal atrial fibrillation. NEJM In Press (DOI:10.1056/NEJMoa1602014)
- * Image is Dr Hooks' own.



Located from the Rintoul Street entrance Newtown, Wellington
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Laser Therapy for Spider Veins and Vascular Skin Conditions

Mr Richard Evans



Wakefield Hospital

Area: Vascular. Article content supplied by: Mr Richard Evans, Vascular Surgeon
ph (04) 389 4999



Vascular Laser a Welcome Development

Vascular lasers have been around for a while, but the recent development of a system combining both of the optimum wavelengths to treat vascular skin lesions has been a welcome development.

The new Cutera Excel V Vascular Laser System combines 1064nm and 532nm wavelengths which optimally target oxyhaemoglobin within blood vessels (and also melanins with brown skin pigments). This enables us to treat a wide spectrum of vascular skin conditions such as phlebectasias (prominent reticular or blue veins), spider veins on the face and legs, angiomas, venous lakes, and the telangiectasia range – including rosacea and diffuse redness.

Also, of interest, the laser system is capable of treating warts and various other skin conditions such as skin tags by ablating their arterial supply.

Laser Treatment is Well-tolerated?

The Excel V laser is generally well-tolerated by patients owing to its water-cooled treatment tip that cools the skin before and after laser treatment dramatically reducing any discomfort. Most patients experience a sensation akin to being pinged by a rubber band. Local anaesthetic creams and spray-on cooling preparations are rarely needed. Afterwards, the treated area usually develops an erythema which lasts for several hours before settling.

Treatment Outcomes Pleasing

Treatment outcomes have been very pleasing to date. Overall, improvement in appearance is the most desirable outcome. In the case of spider veins (which can be extensive), a reduction in number of spider veins can be achieved in most patients after several treatment sessions.

Specialist Vein Health is offering the new vascular laser service through its clinics in Wellington, Kapiti, Palmerston North and Nelson.



SPECIALIST VEIN HEALTH

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EDI: veinspec
W: www.svh.co.nz

Wakefield Hospital,
Level 3, 30 Florence St,
Newtown, Wellington

Connect 2016

It was our absolute pleasure to deliver the Connect 2016: Acurity GP Conference recently held over a stunning two days in May at Te Papa. We would like to thank everyone for their attendance in making this conference as successful as it was.

Over thirty speakers shared their specialist knowledge to the GP community in Musculoskeletal, Ophthalmology/Neurology, Renal Disease/Cardiology and Men's Health areas. The programme this year offered a variety of workshops, quick-fire presentations, plenary sessions and practical demonstrations which ensured there was plenty to choose from.

This year delegates came from near and afar. It was wonderful to see our regular faces and also fantastic to meet the delegates who travelled to be with us. We hope you found our conference value for money, enjoyed the selection of talks and took the opportunity to mingle at the Networking Function.

We are especially grateful to the many loyal sponsors who continue to support this conference and it was lovely to have our new sponsors on board. There was a real buzz in the exhibition area as the exhibitors shared their knowledge of their products with you.

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

Delegate feedback showed you were impressed by the quality of the speakers and found great value in the sessions. We have also taken on board the constructive comments which we will use to improve next year's conference. Amongst the feedback there were some great suggestions on what you would like to see at next year's conference. We are working on incorporating some of the ideas into the programme.

Finally we would like to congratulate all the prize winners with a very special mention to Dr Marta Kroo, Barraud Street Health Centre, Dannevirke, who was the winner of the Acurity Health Group Practice Prize of the Amtech MPVT Surgical Bed.

Please save the date for next year's conference Friday 19th and Saturday 20th May 2017, Te Papa, Wellington.

MAY 2017						
MON	TUE	WED	THU	FRI	SAT	SUN
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					

Connect
2017



"Thank you – very well organised – I enjoyed it!"

Congratulations to Dr Marta Kroo of Barraud Street Health Centre, Dannevirke, winner of the Acurity GP Conference Practice Prize. Above: Dr Jane Laver enjoying the Amtech MPVT 3 Section Electric Surgical Bed.

"Food was excellent"

"Thanks for another great conference"

"Format was good going between plenaries and concurrent sessions"



"Keep up
the excellent
variety of quality
content, topics
and speakers"

Connect 2016 – Special Thanks

Special thanks to the following speakers

Mr Neil Aburn,
Ophthalmologist
Professor Mike Berridge,
Cancer Cell Biology Group
Leader, Malaghan Institute
of Medical Research
Lorna Bingham,
Nurse Practitioner in Diabetes
and Related Conditions
Mr Brendan Bowkett,
Paediatric Surgeon
Mr Kim Broome, Urologist
Dr Richard Carroll,
Endocrinologist
Mr Kenneth Chan,
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Dr Nick Kenning,
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Dr Muhammad Khalid,
Ophthalmologist
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Orthopaedic Surgeon
Dr Jeremy Lanford,
Neurologist
Dr Helen Long,
Ophthalmologist
Mr Steve Mackey,
Ophthalmologist
Kay McLaughlin,
Senior Renal Nurse
Dr Ian Murphy,
Sports Physician
Professor John Nacey,
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Mr Fred Phillips,
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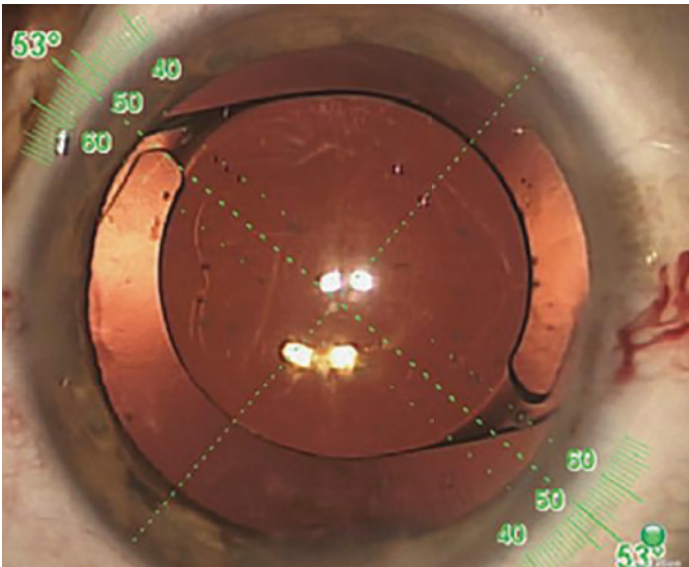
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Toric IOL, Why are they Good Options for Cataract Patients?

Royston Hospital | Area: Ophthalmology. Article written by: Dr Muhammad Khalid, Ophthalmologist, ph (06) 873 1152



Manual marking system



One of the digital marking system

Cataract surgery is the most common ophthalmic procedure performed. As early as 800BC a procedure was described and practiced to push cloudy lens' back into the eye for cataracts.¹

Since then cataract surgery has gone through stages of refinement over time and with current Phacoemulsification and intraocular lens implant technique the achieved results are satisfactory. On the other hand more and more patients expect to see well without glasses after cataract surgery. However, there are a few limiting factors in achieving this e.g. pre-existing regular corneal astigmatism and a loss of accommodation (ability to change focus for distance and near) with rigid intra ocular lenses.

There are options to address this to some extent in a selected number of patients. Correction of regular corneal astigmatism can be achieved to a certain degree at the time of cataract surgery using commonly

employed tools for routine cataract surgery. Pleasing results can be achieved. The questions are what degree of astigmatism is important? What is possible? How can we achieve it?

After cataract surgery residual astigmatism would be considered significant if the patient remains dependent on glasses all the time due to astigmatism and if they would be prepared to have another corrective procedure.

Studies show there is little visual benefit in reducing astigmatism of one diopter or less.² There are two commonly employed methods for correcting corneal astigmatism, Toric IOLs and incisional technique.³

Incisional modification include manipulating cataract wound incision, meaning the way it is performed, where it is placed and opposite incision on the clear cornea, limbal relaxing incisions (LRI).

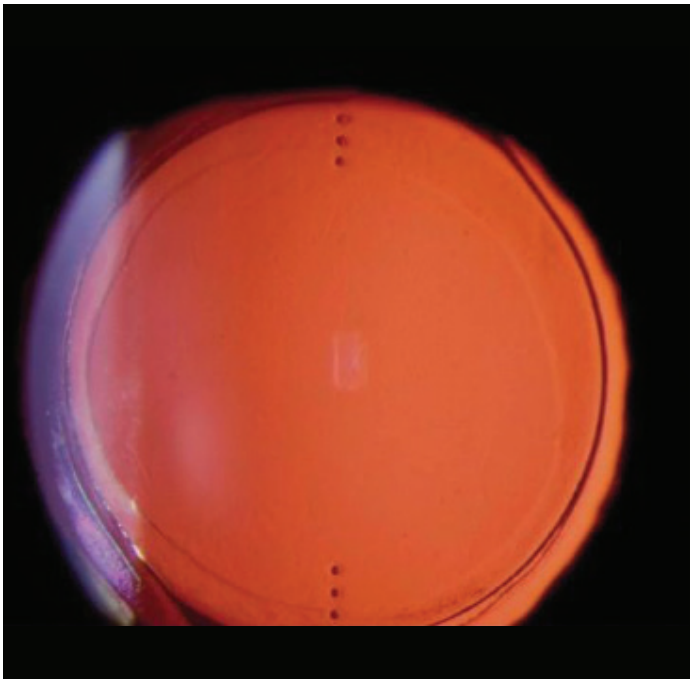
When these incisional techniques are compared to Toric IOLs, the results are similar if astigmatism is not over two diopters, after which Toric IOL would have better outcomes.⁴ Considering the result and relative simplicity of the procedure, ophthalmic surgeons procedure of choice to correct pre-existing corneal astigmatism during cataract surgery remains Toric IOL.

In New Zealand's public system where Toric IOLs are offered, these are performed for astigmatism of over 2.5D, however in private practice usually the option is discussed with patients with astigmatism of 1.5D or over which is in line with international trends.⁵

A significant number, over 40%, of patients undergoing cataract surgery have corneal astigmatism of over 1D and hence can be offered correction during surgery.^{6,7}

The results of Toric IOL implants depend on accurate measurement of astigmatism to decide the power of the required IOL and placement of that IOL at the exact degree of the angle in the eye. When calculating power of such Toric IOL optical biometry is used as usual to calculate IOL and also corneal mapping is done using manual keratometry or corneal topography. Instruments required for this are available in most ophthalmic settings both public and private.

Most IOL manufacturers provide Toric IOL calculators, which help determine exact IOL. To place IOL in the exact degree of angle, either conventional marking systems using slit lamps,



Toric in the eye with angle marking on the lens visible

marking kits or digital systems are used. Though digital systems achieve alignment within five to 10 degrees of the target angle, conventional systems do not fail to achieve it. Placing such IOL at an angle requires a minimal learning curve.

Toric IOL design is continuously evolving and helping to achieve desirable results. These days with all the advances cataract surgeons feel comfortable to correct stable regular corneal astigmatism when performing cataract surgery, using the available tools. Employing digital technology does provide some improvement in outcomes, however, using available tools in hand in day-to-day practice like optical biometry, corneal topography, a Toric IOL calculator and manual conventional marking systems, satisfying results can be achieved for both patients and surgeons.

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References

1. Duke-Elder, 1969; Chan, 2010
2. Chen L, Artal P, Gutierrez D, Williams DR, Neural compensation for the best aberration correction, J Vis, 2007;7:1-9
3. Astigmatism management in cataract surgery with the Acrysof toric intraocular lens. J Cataract Refract Surg. 2008;34:1483-1488
4. Poll JT, Wang L, Koch DD, Weikert MP, Correction of astigmatism during cataract surgery: toric intraocular lens compared to peripheral corneal relaxing incisions, J Cat Refract Surg, 2011;27:165-71
5. Leaming D, 2013 Survey of ESCRS Members: Results and Trends. Presented at ESCRS Annual Meeting, London, UK, 2014
6. Hoffer K.J. Biometry of 7500 cataractous eyes. Am J Ophthalmol. 1980;90:360-368
7. Khan MI, Muhtaseb M. Prevalence of corneal astigmatism in patients having routine cataract surgery at a teaching hospital in the United Kingdom. J Cataract Refract Surg. 2011;37:1751-5.

* Images: Author's own.



Dr Muhammad Khalid

Technology for Hearing Loss: The Way Forward

Bowen Hospital

Area: Audiology. Article written by: Jan Morris, Principle Audiologist, ph (04) 566 5145

1. The Phonak LYRIC

The truly 'invisible' hearing aid is here. Meet **The Phonak LYRIC**. The manufacturer Phonak claims it is "The first and only 100% invisible hearing aid".

The Lyric is a deep-canal-fitting micro device that is fitted by a Lyric specialist audiologist using an ENT microscope. However, this hearing device is not for everyone. A full communication needs assessment is performed and the size and shape of the individual ear canal is considered.

Since the Lyric is placed deep in the ear canal the sounds heard are very different, with a potentially more natural sound quality experienced.

The Lyric is replaced only when the battery has expired, typically every two to three months. As with a conventional hearing aid, fine tuning is an important part of the success and acceptance of the Lyric. Adjustments are made by the Lyric specialist audiologist using a wireless probe which is placed in the entrance of the ear canal. The Lyric may allow the hearing impaired to successfully use a stethoscope.

It is expected that the Lyric will be available in late 2016. Please contact Hearing Consultants for further information.



Hearing aids controlled via **smartphone applications** are now entering a second generation of technology.

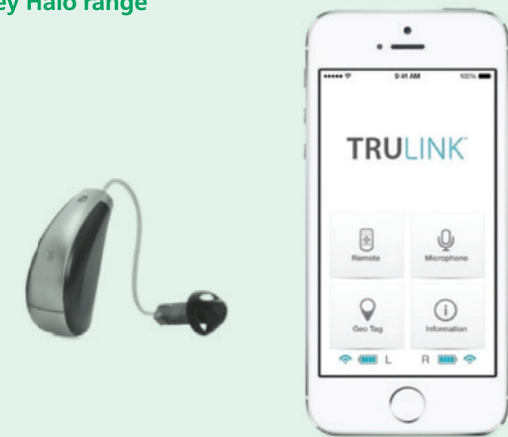
Two hearing aid companies GNResound and Starkey have hearing aids that are wirelessly controlled by an app. These are the models:

2. Resound LiNK range



www.resound.com/en-AU

3. Starkey Halo range



www.starkey.co.nz/hearing-aids/technologies/halo-2-made-for-iphone-hearing-aids

The functionality that both of these wirelessly controlled hearing aid apps include:

- Direct streaming of phone calls and music
- Remote control of volume and selection of different programs for different listening environments
- Pitch or frequency adjustment combined with a volume control which can be changed on your touch screen by dragging your finger. This enables the best acoustic setting for each individual listening environment. This setting can then be geo-tagged for auto-selection next time you visit the same location
- Your phone can be used as an external microphone to give you an extra boost of hearing for distant or soft speech
- Utilisation of the hearing aid microphones for phone conversation, with the phone remaining in a pocket.

Technology is advancing at a great rate, and the spin-off for the hearing impaired is immense. In the midst of these advances it is easy to lose sight of the fact that hearing loss is a neurosensory deficiency causing deprivation of auditory stimulation. It is therefore important to always remember that compensating for hearing thresholds is only the beginning of the process.

Auditory processing and adaptation is the real success behind any improvement in hearing ability. It is important to think of hearing aids and devices not just as consumer electronics but as a part of a rehabilitation treatment.

To achieve successful hearing solutions it is important to always refer your patient to a fully qualified audiologist that can offer a range of solutions best suited to their communication needs.

References

1. Genter DJ, Frick KD, Chen D, et al, "Association of Hearing Loss with Hospitalization and Burden of Disease in Older Adults" JAMA, June 12, 2013, Vol 309, No22
 2. Amieva, H., Ouvrar, C., Giulioli, C., Meillon, C., nRullier, L., & Dartigues, J.F. (2015). Self-reported hearing loss, hearing aids, and cognitive decline in elderly adults: a 25-year study. *Journal of the American Geriatrics Society*, 63(10), 2099-2104.
 3. Statistics NZ Disability Survey 2013
 4. Beck, D.L. (2015). The state of the art: Hearing impairment, cognitive decline, and amplification. *Hearing Review*, 22(9), 14.
 5. Weinstein, B.E. (2015). Preventing cognitive decline: Hearing interventions promising. *Hearing Journal*, 68(9), 22-24, 26.
 6. HawkinsK, BottoneFG Jr, Ozminkowski RJ, et al. "The prevalence of hearing impairment and its burden on the quality of life among adults with Medicare Supplement Insurance. *Qual Life Res*. 2012; 21(7):1135-1147.
 7. Sergei Kochkin, PhD, - "The Impact of Treated Hearing Loss on Quality of Life." Better Hearing Institute, Washington DC.
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3. Starkey Halo: Starkey Hearing Technologies.

Jan Morris



Did you know?

9%

Hearing impairment affects 380,000 New Zealanders' (nine percent of the total population).³



Hearing loss has a direct effect on the overall health and well-being of your patient.

It has been directly related to:

- An increased risk of hospitalisation⁴
- An increase in cognitive decline. Patients with untreated hearing loss experience a 30-40% greater decline in thinking abilities compared with those without hearing loss⁵
- An increase in the likelihood of depression⁶
- An increase in social isolation, anger, anxiety, and emotional instability.⁷



Fortunately, with acknowledgement of a hearing loss and having access to quality and trustworthy information a successful rehabilitation outcome is likely. Successful rehabilitation is well known to lessen many of the above associated health issues and quality of life concerns.

Jan Morris

Jan Morris has been practicing Audiology from Bowen Hospital since 1992. She was previously Charge Audiologist for Wellington, Kenepuru and Masterton DHBs. She is a full member of the NZ Audiological Society and a foundation member of Independent Audiologists NZ.

Hearing Consultants

Hearing Consultants are based at the Bowen Centre, 94 Churchill Drive, Crofton Downs, Wellington 6035 P: (04) 566 5145.

Royston Hospital Updates



Written by: Denise Primrose, General Manager, Royston Hospital
ph (06) 873 1111

Stage One of Royston Hospital Re-development Gets Go Ahead

The first stage of a proposed multi-stage multi-million dollar re-development of Royston Hospital in Hastings has been confirmed which will deliver significant benefits to the Hawke’s Bay region.

Acurity Health Group Limited recently received funding approval for stage one of the project from its new owner Evolution Healthcare.

Stage one will see modifications to the first floor of the Royston Centre, relocating ground floor non-clinical support functions. This will facilitate the next stage plans for expansion and enhancement of the day surgery unit, patient admission facilities, post operation recovery unit and patient and family waiting areas. Further stages of the redevelopment will see operating theatre capacity increased along with expansion to support service areas.

Royston Hospital General Manager Denise Primrose said the initial 10 month project in the Royston Centre was expected to commence in August with minimal disruption to existing hospital services.

“This is an exciting opportunity for Royston to ensure we provide for an increasing demand for elective surgery within the Hawke’s Bay community. Patients deserve certainty and timeliness of access to their elective surgery in the private sector and our contracts with health insurers, ACC and Hawke’s Bay District Health Board also require that we meet expectations of timeframes. The proposed site redevelopment provides enhanced areas for patients primarily in the day surgery unit along with increased operating theatre capacity and expansion to areas that support the functions of our hospital as our capacity continues to grow.”

A stream of recent investments in the past 12 months including the most up to date endoscopy equipment, sterilisation and orthopaedic equipment keeps Royston at the forefront of private surgical hospitals in New Zealand. We are proud of our 90 year history as the region’s only full service private hospital and this investment represents a major boost for surgical healthcare options in our community.

Royston has a unique and long-term relationship with the Hawke’s Bay District Health Board and supports the organisation by providing elective surgery to hundreds of HBDHB patients ever year.

Recent surgeries include 50 knee and hip joint replacements and 150 ear, nose and throat surgeries predominantly for children completed under contract for HBDHB through to the end of June.

Sharon Mason, Chief Operating Officer Hawke’s Bay District Health Board, said the collaborative relationship between both organisations was highly valued. “We have a very good working relationship that means more people in Hawke’s Bay have access to elective surgery than they would if both organisations operated in isolation.”

The exact cost of the multi-million dollar re-development has yet to be determined as tenders for the construction have not been concluded.

Written by: Mr Stephen Andrews, Orthopaedic Surgeon
ph (06) 873 1111



Royston Supports Orthopaedic Surgeon Training

In the first week of May the Orthopaedic Surgeons of Hawke’s Bay with the support of the NZOA arranged a week long clinical examination course for final year Orthopaedic Trainees about to sit their Part Two Exams.

Over five days more than 90 patients with orthopaedic conditions freely gave up their time to put the trainees through their paces under exam-like conditions. The event was jointly hosted at Royston and the DHB, and was greatly appreciated by the trainees. The course is recognised as a significant factor in the high pass rate New Zealand Orthopaedic Trainees achieve.

“The amount of goodwill and support from patients, hospital and practice staff to host an event like this was greatly appreciated by all involved.”

New Consultants



Acurity Health welcomes the new consultants on the following pages to Wakefield Hospital and Bowen Hospital. Please contact them directly if you would like more information about their specialties. All of our consultants can be easily viewed on our website www.acurity.co.nz



Mr Sean Galvin
MB ChB (Otago), FRACS (Cardiothoracic)
Cardiothoracic Surgeon
P: (04) 381 8115
F: (04) 381 8116
E: heart@whc.co.nz
EDI: wakheart

Specialty
Cardiothoracic Surgery

I am consulting at the Wakefield Heart Centre which is based at Wakefield Hospital. Please use the Rintoul Street entrance, Newtown, Wellington.

Training

- Basic and Advanced Surgical Training (Cardiothoracic Surgery) in Dunedin, Hamilton, Wellington and Melbourne, Australia
- Fellow in Thoracic Surgery, Melbourne, Australia
- Senior Fellow in Adult Cardiac and Aortic Surgery, Melbourne, Australia
- University Bookshop Prize for Medical Course in Dunedin, 2002
- Obex Prize, New Zealand Cardiac Surgical Meeting 2007, 2008, 2011
- St Jude Award, Royal Australasian College of Surgeons 2010, 2011
- Edwards Travelling Fellowship, Australia and New Zealand Society of Cardiac and Thoracic Surgeons 2010
- Research Award Victorian Division of Cardiac Society of Australian and New Zealand 2012.

Special interests
All aspects of adult cardiac and thoracic surgery with specific interests in:

- Diagnosis, surveillance and management of Thoracic Aortic Aneurysms
- Management of Acute and Chronic Aortic Dissections
- Thoracic Aortic Surgery
- Aortic Arch Replacement
- Aortic Root Surgery
- Valvular Heart Disease
- Coronary artery Bypass Grafting and Arterial Revascularisation
- Minimally Invasive Thoracic Surgery
- Investigation and management of benign and malignant thoracic surgical conditions.

Background
I am a consultant Cardiothoracic Surgeon working at Wakefield and Wellington Hospitals. After graduating from The University of Otago in 2002 I undertook advanced training in Cardiothoracic Surgery through the Royal Australasian College of Surgeons. My post-fellowship training in Melbourne focused on surgery of the thoracic aorta, valve repair surgery, the use of arterial conduits in coronary surgery and both general and minimally invasive thoracic surgical techniques.



Mr Reuben Johnson
LLB, MBChB, DPhil, FRCS (Neuro.Surg), FRACS

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

Specialty
Neurosurgery

Training
Reuben’s neurosurgical training included time spent in London (Atkinson Morley Hospital), Brighton (Hurstwood Park Neurological Centre), Oxford (John Radcliffe Hospital), Cambridge (Addenbrooke’s Hospital), and Melbourne (Royal Melbourne Hospital).

Special interests
Anterior and posterior skull base conditions, neuro-oncology, spine surgery, and head injury.

Background
Reuben qualified in medicine from Glasgow University in 1999 and completed his surgical and neurosurgical training in London, Oxford, Cambridge, and Melbourne. His post-graduate fellowships were in spinal surgery in Vicenza, Italy and in Endoscopic Pituitary Surgery in Oxford. He recently moved to Wellington following three years as Senior Lecturer in Neurosurgery at the University of Otago in Dunedin.

New Consultants

Continued from page 17



Mr Wayne Gillingham

MBChB, MDS(OMS), FRACDS (OMS), FDS RCS(Eng)

Oral & Maxillofacial Surgeon
P: (04) 555 0433
F: (04) 555 0423
E: reception@welloral.co.nz

I am consulting from Bowen Hospital on a Tuesday, Wednesday and Friday.

Specialty

Oral & Maxillofacial Surgery

Training

I trained in New Zealand and England and completed my undergraduate dental and medical degrees at Otago. I completed a Master's degree in OMS and clinical training in NZ and UK. I have college fellowships from both countries.

Special interests

- Oral Surgery
- Wisdom teeth
- Dental Implants
- Sleep Apnoea
- Snoring
- Orthognathic Surgery
- TMJ disorders.

My research interests are in sleep apnoea and TMJ conditions.



Dr Andrew Rhys Davies

BSc MBChB FRACP Clin.Dip.Pall.Med

Respiratory and Sleep Physician
P: (04) 479 2019
F: (04) 479 8563
E: spec.centre@Bowen.co.nz

I am consulting at Bowen Hospital, 98 Churchill Drive, Crofton Downs in Wellington.

Specialty

Respiratory and Sleep Physician

Training

I trained in Cardiff where I obtained a degree in psychology as well as a medical degree. I came to New Zealand having worked in several hospitals in South Wales. Having completed a broad training in General and Respiratory Medicine in Waikato Hospital I came to Wellington to complete my specialist training in Sleep Medicine.

Special interests

As well as working in Bowen Hospital I am a Consultant Respiratory and Sleep Physician working in Wellington and Hutt Hospitals. I am a Senior Clinical Lecturer at the Wellington School of Medicine, University of Otago, teaching students and junior doctors. I am also involved with WellSleep; the sleep investigation centre run by the University of Otago.

My special interest is Sleep Medicine and I see a broad variety of respiratory and non-respiratory sleep disorders. I also see patients with respiratory conditions.

Background

I am originally from Wales and have been in New Zealand since 2006.

I am a Fellow of the Royal Australasian College of Physicians, a member of The Thoracic Society of Australia and New Zealand and The Internal Medicine Society of Australia and New Zealand.

I live in Wellington with my wife and two small children. I am a keen rugby fan having grown up in the Welsh Valleys and am a keen walker and an enthusiastic (but inept) snowboarder.

Dr Davies is presenting a CME on Thursday 11 August, 6.30pm at Bowen Hospital on Sleep Disorders. To register, email: pgg@acurity.co.nz



Dr Mohammad Alansary

BDS (Caion), FDSRCSed, MDentSci (Leeds), MPaedDent RCSEd

Paediatric Dentist
P: (04) 499 8608
E: Thorndon@capitaldental.co.nz

Specialty

Dentistry

I am a Paediatric Dentist consulting at Capital Dental, 1 Murphy Street, Thorndon and operating at Bowen Hospital 98 Churchill Drive, Crofton Downs in Wellington.

Training

- BDS degree Oral & Dental Medicine from Cairo University (Egypt)
- Fellowship in Dental Surgery of the Royal College of Surgeons of Edinburgh
- Masters in Dental Sciences in Paediatric Dentistry from University of Leeds (UK)
- Membership in Paediatric Dentistry of the Royal College of Surgeons of Edinburgh.

Special interests

I am interested in the management of dental trauma in children and adolescents, behaviour management of children and stem cell research.

Background

I worked as an Oral Surgeon/Trauma Registrar for five years in Kuwait Ministry of Health and joined Leeds University (UK) in 2003. I joined the University of Otago in 2012 to do my PhD in Paediatric Dentistry. I am registered with New Zealand Dental Council in 2014 as a specialist in Paediatric Dentistry and work with Capital Dental Thorndon to provide Paediatric Dentistry services in Wellington.



Dr Chris Cederwall

MB CHB, FRACP, BSC

Gastroenterologist
P: (04) 479 8261
F: (04) 479 9084
E: endo@bowen.co.nz

I am consulting from Bowen Hospital.

Specialty

Gastroenterology

Training

- My basic medical training took place in the Wellington region with my Gastroenterology training taking place in Auckland and Waikato.
- Gastroenterology Fellowship, Addenbrooke's Hospital, Cambridge, UK.

Special interests

- Coeliac disease
- Hydrogen breath tests
- Lower GI (Gastro)
- Upper GI (Gastro)
- Endoscopy (Gastro)
- Oesophageal Manometry, pH testing and GI motility
- Nutrition
- Inflammatory bowel disease
- Irritable bowel syndrome
- Hepatology.

Background

I am born and raised in Wellington. I attended Otago University where I obtained my BSC and medical degree. I completed my fellowship overseas in oesophageal manometry, GI motility, inflammatory disease and endoscopy.

I have recently returned to Wellington and looking forward to working in my home town.



Mr Hamish Cameron

BDS, MDS, MB ChB

Oral and Maxillofacial Surgeon
P: (04) 499 0433
F: (04) 499 0432
E: reception@wgtnoralsurg.co.nz

I am consulting at Wellington Oral Surgery located at 136 The Terrace, Wellington and operating at Bowen Hospital, 98 Churchill Drive, Crofton Downs, Wellington.

Training

- BDS (Bachelor of Dentistry) 2003
- MB ChB (Bachelor of Medicine and Bachelor of Surgery) 2013
- MDS (Oral and Maxillofacial Surgery) 2013.

Special interests

I have special interests in Dentoalveolar Surgery – third molar exodontia, preprosthetic grafting and dental implant placement.

Background

After graduating from Dentistry in 2003 I worked as a Dental House Surgeon before joining Defence serving as a Dental Officer for almost four years in Auckland and Waiouru where oral surgery became my focus. I returned to Dunedin to complete Medicine and my Masters in Oral Surgery, completing a Masters Research Project before gaining experience in the Hawke's Bay and Auckland regions in the public system.

In 2016 I joined a private oral surgery practice in Wellington and continue to provide oral surgery support to practices in Auckland, Masterton and Invercargill.

Returning Consultant



Dr Nicola Smith

Dr Nicola Smith, Respiratory Physician has returned from maternity leave.

Nicola is a specialist in Respiratory and Sleep Medicine and a Fellow of the Royal Australia and New Zealand College of Physicians.

During Nicola's fellowship at Sir Charles Gairdner Hospital, Perth she developed a strong interest in lung cancer, pleural, asbestos related diseases. She is actively involved in research into better management of malignant pleural disease, chronic cough, bronchiectasis and atypical infection. Nicole also runs a regional indwelling pleural catheter service and national training courses in thoracic ultrasound.

Nicola completed a broad training in both Respiratory and General Medicine in New Zealand, the UK and Australia. Following completion of training in respiratory medicine in Wellington, Nicola went on to a fellowship in pleural

diseases at Sir Charles Gairdner Hospital, Perth, Australia before returning to consultant practice in Wellington in 2011.

In addition to her work at Bowen Hospital, Nicola maintains appointments at Wellington Hospital and the Medical Research Institute of New Zealand and is a Clinical Senior Lecturer at Wellington School of Medicine, University of Otago.

Nicola's special interests are chronic cough, Bronchiectasis and atypical infection and lung cancer.

Nicola's contact details

P: (04) 479 2019
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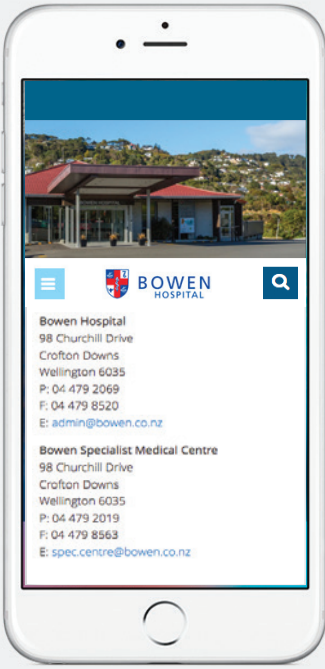
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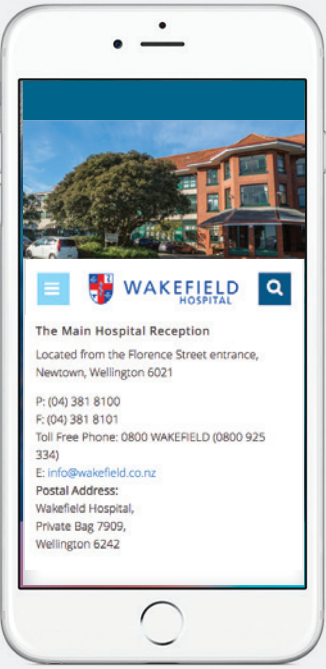
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