THE ACMA NEWSLETTER July2013

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PRESIDENT'S ADDRESS

I would like to thank Kate Yang for her seven months tenure as President. Kate has been awarded the prestigious Fulbright scholarship to complete a Master of Public Health degree in Clinical Effectiveness, specialising in statistical and epidemiological methods for translating scientific research into clinical relevance, at Harvard University in Boston, USA for 1 year. The ACMA is very proud to have one of its own being awarded this prize.

As current vice president I will try to fill her boots. Kate has been able to guide the committee to a firm path where we are able to attract non-medical sponsors for our meetings. I would like to continue to follow in the vision Kate has developed for the Association. We need to improve ties with YACMA, show publicly the charitable work that we do and to work closely with the Ministry of Health and NZMA when interests of Chinese are concerned.

We are proud to have supported YACMA at its recent June retreat for it members to foster team building. They are also in the process of organising an annual skills weekend for August. ACMA would love to take a leaf from the YACMA book in fostering other collegial actvities so if any of the membership have any ideas would be greatly appreciated.

I would like to remind the members that this a collaborative association where all of its members can contribute to the success of the organisation by offering any suggestions and ideas which they feel might be useful.

A major planning exercise we're undertaking is the biennial ACMA conference in 2014. If there are any requests that you have please submit them promptly to the planning committee (info@acma.org.nz).

The committee are also in the throes of organising a revamp of our seven year old website to better showcase the ACMA to the world.

I would implore members who have Mandarin speaking ability to please consider participating in CHAINZ (http://chainz.org.nz/) in explaining to the public via televised media on medical conditions which may affect our patients. Innovators Drs Andrew To and Derek Luo (Derek.Luo@middlemore.co.nz) would be interested in hearing from you.

Wishing you an eventful rest of the year now that we're on the right side of winter getting closer to Christmas.

Adrian Wan, President ACMA

Hey everyone, welcome to another issue of the ACMA newsletter. If you have any news, pictures, ideas and advertisements you would like to see in future newsletters, please email us at **editors@acma.org.nz.** The newsletter currently reaches 270 ACMA and YACMA members! We hope you enjoy this issue.

Jai Min, John & Varun

2013 ACMA TEAM

ACMA President
Dr Adrian Wan

Past President
Dr Weng-Key Chan

Secretary
Dr Richard Yu

Treasurer
Dr Benson Chen

Membership Secretary
Maryanne Ting

CME Coordinator
Dr Adrian Wan

General Committee
Dr Weng-Key Chan
Dr Carlos Lam
Dr Wilson Young
Mr Alex Ng
Dr Stanley Loo
Dr Derek Luo
Late Dr Annie Low

YACMA President
Debra Yeh

Student Clinical Reps
6th Year - Michael Plunkett
5th Year - Johnny Wu
4th Year – Christopher Wong

Student Preclinical Reps
Gabrielle Nathania Jee
Peter Ting
Kevin Liu

Newsletter Editors
Jai Min Choi
John Mak
Varun Thirayan

YACMA NEWS

Amazing race

The 2nd ever YACMA amazing race was held on 11th of May, starting at the domain. 8 teams competed in the race spanning across the domain and the area around Grafton campus. Teams were very competitive but all had a great time in this challenge of wits, fitness and unique skills.

Boardgames afternoon

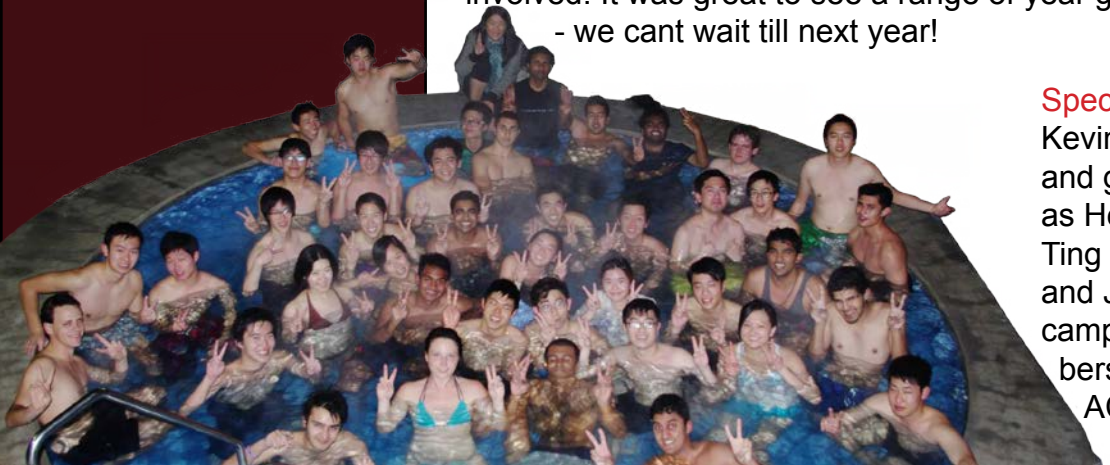
On the afternoon of 16th of May, YACMA held its first board games event of the year. The event was well received with over 20 people attending playing games such as mah jong, pictionary and risk. Many thanks to Gabrielle for making the delicious afternoon tea that was provided.

Quiz night

The annual quiz night was held at Grafton on 19th of June with 13 teams of 4 competing, a record number! Teams were quizzed on knowledge ranging from literature and pop culture to harry potter and pokemon. We received much positive feedback from the team. Many thanks to Medical Books for sponsoring us prizes for the winning team (The Yellow Walkers) and thanks to the Gabrielle Jee for cooking the delicious snacks.

YACMA Retreat

The YACMA Retreat, one of the most anticipated YACMA events of the year, took place in Pacific Park Christian Camp from the 22nd to the 25th of June. The turn out was remarkable with 56 students attending (36 in 2012). This event was a chance for us to relax after exams and get to know others outside of our year group - even clinical students attended! We enjoyed many activities and challenges which became surprisingly physical as participants got very involved. We also enjoyed a sunset atop Mount Manganui. Before the fourth years had to leave they gave us a very entertaining show by playing the game 'egg roulette' (each person cracking an egg on their head - 4 hard boiled and 6 raw). Unfortunately the hard boiled eggs were soft boiled, much to the displeasure of the fourth years.Overall the Retreat was an amazing experience for all those involved. It was great to see a range of year groups mixing and mingling - we cant wait till next year!



Special Thanks to:

Kevin Liu and Peter Ting for itenerary and game organisation, Gabrielle Jee as Head Chef, Debra Yeh, Maryanne Ting for guidance, John Mak, Anne Yu and Josephine Mak for support during camp, all drivers and YACMA members for the memoriable times, and ACMA for financial support.

KEY REMINDERS

Membership

We would like to invite existing members to renew their membership through the membership forms available from the ACMA website or through the Membership secretary. Membership fees can be paid to the Treasurer Dr Benson Chen via cheque.

Looking for new members

Please introduce the Association to your colleagues.

Future CME Dates

Please take note: 18th April, 18th August, 22nd September and 17th November (AGM) (all are Sundays)

New benefit

Les mills have offered ACMA members 10% off a 12month long gym membership. For more details see http://www.lesmills.co.nz/affiliates/auckland-chinese-medical-association/

Volunteers needed for research study

Description: This study will look at the influence of Chinese cultural values on the food habits, physical activity and overweight/ obesity in Chinese immigrant families. This study will also explore how these factors might change in the process of adjusting to life in New Zealand. Your participation will take no more than two hours. We will ask you to participate in a family and individual interview.

To participate: You must be of Chinese descent. Be a New Zealand citizen or permanent resident currently living in the Auckland region. Be aged 18 years or over. Agree to be interviewed with another family member who is related to you as being either your 'parent' or 'child'. The 'parent' will have migrated to New Zealand within the past ten years or over, from either: The People's Republic of China, Singapore, Hong Kong, Malaysia or Taiwan. The 'child' can either have migrated as well (from one of the above countries), or be New Zealand born. Family members will need to be living together. You will also need to identify as being either of a normal weight, or overweight.

Participating families will be given a supermarket voucher in appreciation of their time.
To find out more, contact the researcher, Shan Mei Chan, on 021 1275525 or s.chan@auckland.ac.nz

Online PDF poster in Chinese (http://acma.org.nz/doc/research-chinese.pdf) and English (http://acma.org.nz/doc/research-english.pdf) are available.

INTERVIEW: DR DEREK LUO

We interview another new addition to the 2013 ACMA team

by Jai Min & Varun

Dr Derek Luo is a New Zealand trained Gastroenterologist who was born in Wellington of Taiwanese descent who grew up in Hong Kong. He speaks Mandarin and Cantonese. He graduated from Otago Medical School in 1999 and completed specialist training in Internal Medicine and Gastroenterology in the Auckland region in 2007. Following a two year research fellowship in advanced therapeutic endoscopy at The Chinese University of Hong Kong, he returned to practice at Middlemore Hospital as a Consultant Gastroenterologist and General Physician. He is also actively involved in the promotion of health in the Chinese community in Auckland through the Chinese Health Awareness Initiative (CHAINZ).

Having grown up in Hong Kong, how did you end up in Otago Medical school and now in Auckland?

I was born in Wellington and moved to Hong Kong as a kid. The plan was always to return to New Zealand to study. I decided that I wanted to study Medicine as a teenager and came back to Otago to do my medical intermediate. My clinical years were spent in Wellington and my Trainee Intern year in Christchurch. My wife and I thought Auckland would be a nice place to live as we both grew up in Hong Kong. It seemed like a city that was a reasonable size. We did our internship in Auckland City Hospital. We then spent a year working in Sydney, however preferred Auckland because of its size and friends that we made here. The rest is history. After specialising in Internal Medicine and Gastroenterology I worked in Hong Kong for two years and developed a subspecialty interest in Biliary and Pancreatic disease learning ERCP and Endoscopic Ultrasound. I returned back to Middlemore Hospital in 2010 as a Consultant and the rest is history.

What inspired interest in Gastroenterology?

My interest in Gastroenterology came late and I stumbled upon it by accident. When I graduated I wasn't sure whether I should pursue a career in Medicine or Surgery. My wife decided for me that I should pick a Medical subspecialty. I toyed with the idea of Dermatology and Immunology. After my fellowship exam I tried a few different specialties out and really enjoyed it. You get to use your hands and it completes General Medicine well as a career, where you see a variety of interesting medical problems. I talked to a lot of people about their specialties before deciding and the Gastroenterologists I met always seemed to be a happy bunch.

What piqued your interest in ACMA and joining the exec? And what areas would you like to see ACMA focus on in the future?

> " ...the Gastroenterologists I met always seemed to be a happy bunch."

I joined ACMA as a junior doctor mainly as a House Officer. I got busy with my vocational training and stopped attending for a few years. When I returned back to New Zealand, I joined ACMA again at that point to meet people. I decided to join the exec because there are a lot of Chinese doctors around in Auckland as well as Chinese patients now and I wanted to do something to give back to the community.

I noticed there is a real gap with young doctors being active in ACMA especially in the hospital system and I would like to change this. A lot of people are not aware that we even exist. I would like to get more young doctors involved in various areas – for example mentorship of students, junior doctors, further research of Asian Health (maybe summer studentships) and more recently increasing health awareness to the Chinese population. This is one of the reasons why in conjunction with Andrew To (Cardiologist at Waitemata DHB), Tina Sun (Medical RMO),

Paul Cheng (Surgical RMO) and Willy Wang (Surgical RMO) we formed the Chinese Health Awareness Initiative New Zealand (CHAINZ).

Can you give us an update of CHAINZ and how would you like to see it progress?

As a group, the objective of CHAINZ is to increase health awareness to Chinese New Zealanders. At the moment we have been lucky to work in conjunction with World TV to go on a current affairs talk show dedicated to health on Thursday evening between 7-8pm. The show is a hour long, and as a group we have arranged various Mandarin speakers to talk about various health topics. This started on 4.4.2013 with a talk on Colorectal Cancer by myself. We also have various other medical disciplines involved (Cardiology, Geriatrics, Diabetes, Opthalmology, O&G, General Practice, Paediatrics, Pharmacy to name a few).

Currently we have a simple website with a summary of the health talks in Chinese. Our hope is to provide a reliable source of Health Information to Chinese New Zealanders and health care workers to facilitate communication with their patients.

What do you consider to be the biggest issue facing the field of gastroentrology?

The biggest issue facing Gastroenterology in New Zealand is what to do about Colorectal Cancer screening. There is a pilot in progress in North West Auckland run by Waitemata DHB under the leadership of Mr Mike Hulme-Moir, Colorectal Surgeon. If the pilot runs well and if we adopt Colorectal Cancer screening, this will have workforce implications. Our public hospitals are all ready overburdened with symptomatic patients on our waiting lists !

Advice for current medical students?

Enjoy Med school and the holidays you have. Develop interests, see the world get life experience. Travel, keep your mind open. Talk to lots of different people when deciding on your specialty. Your career is a lifetime decision. Your priorities and interests will change as you get older and have a family.

What do you enjoy doing in your spare time/interests?

Unfortunately I don't have much spare time with two young girls aged 4 and 6. I enjoy running and this is my main form of exercise as it's time efficient. I used to cycle and play a bit of tennis, which I hope to pick back up one day. I try to run to Middlemore once a week or once a fortnight. I enjoy catching up with friends, spending time with my family. My wife and I enjoy going to the movies so we try to do that regularly. Travelling, dining out. Dreaming about the ideal car!

Something about you that may surprise people?

I worked as a bartender in Hong Kong. I met lots of interesting people doing this. The academic year in Hong Kong finished in July and I had to wait until February to start University in New Zealand. It seemed like a good idea at the time.

What was the funniest situation you have ever been in?

This is a tricky one. Probably shortly after I moved into our house and got locked in my wardrobe after closing the door to get changed. I had no phone and was trapped for about twenty minutes. Eventually I kicked the door down….I have fixed the catch now.

What song best describes your work ethic?

Eight days a week – The Beatles (the title not the lyrics of course). I'm getting a little better at saying "No" to things though.

Thank you Dr Luo.

Restaurant Review:
Food Truck Garage

By Jai Min Choi

In today's hectic world, especially as doctors and medical students, it can sometimes be a veritable mission to put in the effort to make a nutritious and tasty meal, and even harder when you're on a budget. I for one have had to settle for McDonald's out of sheer laziness more times than I would've liked! So upon hearing about the recently opened Food Truck Garage (based upon the Food Truck TV show), which claimed to give classic fast food a healthy twist at a modest price, I knew I had to give it a try.

Located on 90 Wellesley St, its décor is at once rustic yet modern with a warm atmosphere. We ordered from the dinner menu in the early evening to avoid the crowd, as we heard that the waiting times can get very long. We started off with drinks, getting one of each ($5 each) of the 3 house-made soft drinks: cola (with lavender and molasses), lemon (with honey and mint) and ginger (with orange, agave and bitters). The most striking thing about these drinks for me was how un-sweet they were compared to the more familiar brands. It wasn't so much the taste, but the aroma that made these drinks. I found that the lavender gave enough sweetness to the cola so that it didn't need to be loaded with sugar, which made it all the more refreshing. The others also seemed pleased enough with their lemon and ginger drinks.

For food, we split a bowl of baked chips ($6) and ordered a Beefroot burger and 2 Chickette burgers ($12 each). The baked chips bowl included skin-on Agria potato, swede and beets with lime emulsion served with aioli. They were nice, the left-on skin added texture, but they were nothing remarkable. But who doesn't like a good feed of chips? The Beefroot burger is a beef and beetroot patty with lettuce, tomato, gherkins, 'awesome' sauce on a wholemeal spelt bun. The Chickette was a chicken and courgette patty with lettuce, cucumber and lemon hummus, also on a spelt bun. I didn't find the Beetroot patty the most flavourful thing I'd ever tried, but I did find the whole thing pleasing nonetheless. Perhaps they held back on the salt and condiments to make the point of making healthy fast food? However, I thought $12 was a little steep for something you could probably make at home with enough effort.

> "...classic fast food a healthy twist at a modest price..."

The Food Truck Garage makes weekly special dishes depending on what was featured in the last episode of the Food Truck on TV. We were lucky in that the special when we went was a dessert! $9 netted us 3 Tiramisu Profiteroles, consisting of choux pastry with ricotta, vanilla bean, raisin, fig, espresso and cocoa. Once again, it seemed like they were making a point of not being too sweet, which really brought out the other flavours of coffee and vanilla.

Overall, our experience at the Food Truck Garage was a pleasant one! We spent in total $22 each for chips, burgers, drinks and dessert, which, considering that mains alone commonly exceed $20, was good. It's not dinner at the Langham, neither is it a $5 kebab deal, so if you're ever out in town and feeling just a tiny bit classy, the Food Truck Garage is worthy of your consideration.

Lower Urinary Tract Infections

Dr Eva Fong, Urologist
ACMA CME 7.4..2013

Dr. Eva Fong is a graduate of Auckland Medical School and has completed general surgical training and advanced urological training in New Zealand, as well as fellowship training in female pelvic medicine and reconstructive surgery in New York, USA.

Modern "Urogynaecology"

- Traditionally,
  - Prolapse surgery performed by gynaecologists
  - Incontinence surgery by urologists
- Today,
  - A specialty in its own right = *Female pelvic medicine and reconstructive surgery*
  - USA = board accredited fellowship after completion of advanced training in urology (2 yrs) or gynaecology (3yrs)

Overview of lower urinary tract symptoms
- Urinary incontinence
- Pelvic organ prolapse
- Urinary tract infections
- Dysuria/bladder pain

Urinary incontinence

- Types:
  - Stress
  - Urgency
  - Mixed
- Investigation:
  - Primary care – midstream urine
  - Urologist – bladder diary, pad weight, urodynamics (functional test of bladder)
- Urge incontinence treatment
  - Behavioural and lifestyle
    - Fluid intake – assess total volume, minimise caffeine
    - Regulating bowel habits (constipation aggravates bladder symptoms)
    - Timed voiding
    - Pelvic floor exercises – compliance is difficult
      - » Several rapid contractions
      - » Slow deep breathing – may help abolish involuntary contraction
  - First line therapy: medications
    - Anticholinergics – oxybutynin, solifenacin (Vesicare)
      - » Consider efficacy vs side effects (60% experience dry mouth)
  - Second line therapy
    - Intravesical botulinum toxin
      - » Pros: >70% success, daystay procedure
      - » Cons: needs to be repeated every 9 months
    - Sacral neuromodulation
- Stress incontinence treatment
  - First line: pelvic floor exercise
  - Second line: mid-urethral sling surgery – 90% success and minimal morbidity
- Case study:
  - 34 yr old lady
  - Lifelong frequency and urgency incontinence
    - Voids ½ hourly, incontinent 2x day
    - Nocturia x4
  - Otherwise fit and well
  - Normal examination
  - Treatment:
    - Tried vesicare but unable to tolerate dry mouth
  - Urodynamics
    - Involuntary bladder contraction at 30mls, unable to hold more than 60mls
    - Severe overactive bladder
  - Treated with 100 units of botox intravesically
  - At 2 weeks, improved bladder capacity and no further incontinence

Pelvic organ prolapse

- Assessment
  - Symptoms of prolapse:
    - Bulge
    - Pelvic heaviness/ dragging / lower back pain
    - Urinary symptoms/ bowel symptoms/ sexual dysfunction
  - Examination: split speculum technique

- Types of prolapse:
  - Anterior wall: cystocoele
  - Apical: uterine/ vaginal vault
  - Posterior wall: rectocoele (entero-coele)
- Treatment:
  - According to symptoms
  - Expectant if not bothered
  - Non surgical: Ring pessary
  - Surgical Goals
    - Traditional: anatomical result
    - Modern: functional result
  - What does the patient want?
    - Feel better (prolapse reduced)
    - Bladder and bowels to work well
    - Good sexual function
    - Avoid complications
    - Minimise recurrence
  - What are the options?
    - Vaginal repair
      - » Native tissue
      - » Mesh
        - Controversial area
        - Should be used sparingly for high risk and re-current prolapse
        - Risks: infection, pain, erosion
        - Appropriate pa-tient counselling is the key
        - Only trained (few) surgeons should offer this
        - Complications do occur de-spite training
        - Patient concerns should be man-aged promptly
        - If you put it in, must feel com-fortable remov-ing it
    - Abdominal repair
      - » Longer recovery time
      - » More durable (recur-rence <10%)
      - » Preserves vaginal length and function
      - » Only offered by a few surgeons
  - Prolapse should be treated by practitioners equally comfortable with non-surgical, vaginal and abdominal repair, so we do what is best for the patient
- Case study:
  - 66 yr old lady
    - Bulge
    - Noted to have prolapse for some years but not symptomatic until last 2 years
    - S/b gynaecologist and referred to me
  - On examination:
    - Tricompartmental prolapse including her uterine
  - Pelvic US
    - Normal endometrium, normal ovaries
  - Urodynamic studies
    - "occult" stress incontinence
  - Offered
    - Vaginal repair (including
    - hysterectomy)
    - Abdominal repair (hysterectomy or uterine sparing)
  - Wanted a durable, successful operation
  - Wanted uterine preservation
  - Underwent abdominal repair without hysterectomy
  - Discharged day 3 post-op with minimal post-op analgesia

Urinary tract infections

- Uncomplicated UTI:
  - Definition:
    - Women < 55
    - No other comorbidities
    - Not post-menopausal, preg-nant, no recent UTI, no vagini-tis symtpoms
    - Typical symptoms of urinary frequency and dysuria
  - Cystitis
    - Treatment aimed at symptom resolution
    - Reasonable to treat empirically
    - 3 day course effective in >90%
  - First-line

        - Co-trimoxazole/trimethoprim
        - Norfloxacin
- Recurrent UTI:
    - Definition
        - >3 episodes of symptomatic uncomplicated UTI (>1 documented culture) in 12 months
        - 3-5% of UTI
        - Relapse
            - » Same organism as previous UTI
        - Re-infection (25-50%)
            - » Successful treatment, symptoms recur OR 2nd infection with 2nd organism
    - Age based evaluation
        - Adolescent and pre-menopausal women
            - » Relation to sexual activity
        - Post-menopausal
            - » Tumours, obstruction, atrophic vaginitis, prolapse, incontinence
        - Investigations:
            - » Renal tract ultrasound +/- cystoscopy
    - Treatment
        - Prophylactic antibiotics
            - » Reduced daily dose
            - » Post-coital antibiotics
            - » 3 x/ week for 6 month
            - » Patient initiated treatment at early symptom stage
        - Food additive prophylaxis
            - » Cranberry juice/tablets
            - » Lactobacilli probiotics
        - Local hormonal treatment in post-menopausal women
    - Men:
        - Most complicated by prostate pathology
            - » Low risk
            - » <45, no prostatitis/ urethritis, obstructive symptoms of haematuria
        - Urological evaluation
            - » Adolescent
            - » Febrile UTI
            - » Recurrent infections
            - » Suspected complicating factors (BPH)
        - Treatment
            - » 7 days course fluoroquinolones
            - » Febrile, 2 weeks
            - » Culture recommended in all men

Dysuria/bladder pain

- Frustrating symptoms
    - Patient feels they have UTI
- Acute dysuria
    - Most likely UTI (some may be culture negative)
- Chronic dysuria
    - Early urologic referral
    - Exclude malignancy or stone
    - Prevent patient and primary care doctor frustration!
- Etiology:
    - Urologic
        - Chronic pelvic pain syndrome
            - » Bladder pain syndrome or chronic prostatitis
    - Neoplastic
    - Gynaecologic
        - Atrophic vaginitis, vulvodynia
- Bladder pain syndrome
    - Diagnosis of exclusion
    - > 6 months of bladder/ pelvic pain +/- frequency, urgency
    - Investigation required prior to making this
        - 1-2% of women with this diagnosis have sinister pathology eg bladder cancer
        - Urologic evaluation: MSU and urine cytology, renal tract ultrasound and cystoscopy
- Chronic prostatitis/pelvic pain (CPPS)
    - Pelvic/ genital pain
    - Urinary and sexual symptoms
        - Without documented UTI
    - Treatment
        - Treat specific cause if present
        - For pain syndrome
            - » Medications
                - Cimetidine (400mg once a day), amitriptyline (10mg per night for at least

6 weeks)
    - Intravesical instillations (DMSO)
  - Dietary modification
  - Pelvic floor physiotherapy
  - Botox/sacral neuromodulation, last resort as invasive
- Most importantly
  - Patient understands their condition
  - Good therapeutic relationship with one treating doctor

Summary

- Lower urinary tract symptoms can present in a spectrum of conditions which may coexist in the same patient
- Treatment is empiric for simple UTIs, with anticholinergics for overactive bladder and pelvic floor physiotherapy for stress incontinence
- Incontinence and prolapse should be referred to a specialist for assessment and treatment for quality of life
- Recurrent UTIs and bladder should also be referred, especially in older women.

WANTED: Abbey Heights Rest Home is seeking a **chinese speaking general practitione**r who is open to become a contracted RH doctor.

Abbey Heights Rest Home is a small facility with 24 beds and 1 full time RN, located at Massey, majority of our residents are Chinese, therefore it will be ideal to have a chinese speaking GP. Our current GP is Dr Yukming Ip who is also a member of your association, will no longer able to work with us by the end of 2013 due to personal matters. The workload and time-demand is expected to be much less compare to other large facilities, We only required monthly visit rather than weekly.

If interested, please contact Nancy Xia at 09 833 9106 or abbeyheights@hotmail.com

Acute Low Back Pain

Dr Charles Ng MBChB, FAFMM,
CME 19/05/2013

What constitutes Low Back Pain?

- Lumbar spinal pain
  - Pain originating from the T12 to S1 spinous processes or from the lumbar erector spinae muscles
- Sacral spinal pain
  - Pain involving the S1 spinous process, posterior superior iliac spine or sacrococcygeal joint
- Note the following ARE NOT low back pain
  - Flank or loin pain
  - Gluteal pain of local causes
  - Sciatica/ radicular pain

FEATURE	RADICULAR PAIN	SOMATIC REFERRED PAIN
Distribution	entire length of lower limb, but below knee > above knee.	Anywhere in lower limb, but Proximal > distal.
Pattern	narrow band, travelling quasi segmental but not related to dermatomes; not distinguishable by segment	wide area, Relatively fixed in location quasi segmental but not dermatomal; not distinguishable by segment. Boundaries difficult to define, but Centroid identifiable.
Quality	shooting, lancinating, perhaps like an electric shock	dull, aching, Perhaps like an expanding pressure
Depth	deep as well as superficial.	deep only, lacks any cutaneous quality

Table LR.2.10. The distinguishing features of lumbar radicular pain and somatic referred pain.

Timeline of Low Back Pain

- Acute – pain persists from 0 to 6 weeks
- Subacute – pain persists from 6 to 12 weeks
- Chronic – pain persists for more than 12 weeks

Prevalence and natural history

- Acute LBP is common, affecting around 1/3 of adults in any given year (A third of these patients seek treatment)
- Most acute LBP resolve within 2 weeks with 70-90% recovering fully within 3 months
- However, relapse is common and up to 10% develop chronic pain & disability

History

- Onset and duration of pain
  - Pain triggered by specific event
  - Spontaneous onset (during normal activity)
  - Look for fractures if suspect significant trauma
- Site and radiation
  - Patients may present with back pain only or with leg pain as well, which may be somatic referred pain (pain due to the stimulation of peripheral endings of nociceptive afferent fibres) or radicular pain (neurogenic pain due to stimulation of nerve roots or dorsal root ganglion of a spinal nerve). The following table summarises the characteristics of radicular and somatic referred pain.
  - In patients presenting with leg pain on top of the LBP, it is important to determine the dominant site of pain, be it the lower back or the leg. In cases where the leg pain is dominant, it is likely that the pain is due to radicular pain.
- Precipitating and relieving factors
  - Mechanical LBP is relieved by rest and worsens with activity. On the other hand, pain due to inflammatory spondyloarthropathy is precipitated by rest and patients often feel better with activity
  - Pain due to disc disorders is aggravated by flexion, e.g. with prolonged sitting. Contrast that with spinal stenosis, which worsens with extension and is associated with claudication.
- Severity and disability
  - The severity can be assessed by the usual VAS (visual analogue scale) or NRS (numerical rating scale)
  - Depending on its severity, LBP may impair ADL (activities of daily living) including sleeping, sitting, standing, walking, driving, work, etc. This may be assessed using a short OMPSQ.
  - Sleep impairment due to nocturnal pain may be a red flag for a much more serious pathology
- Neurological deficit
  - Radiculopathy such as the cauda equina syndrome tends to be associated with radicular pain, resulting from the compression of the neural

elements below the end of the spinal cord (L1-2 level). This causes severe LBP with bilateral leg symptoms, including pain, weakness impairing gait, paralysis and sensory changes (saddle anaesthesia, perineal numbness). Patients may also complain of other symptoms, e.g. urinary dysfunction and reduced bladder/ urethral sensation, bowel disturbance (incontinence, constipation), reduced anal tone on PR, sexual dysfunction.
This is an urgent condition requiring urgent referral to the hospital for assessment and may require surgical spinal decompression to prevent permanent neurological damage.

- Symptoms of systemic illness
  - Loss of appetite, weight loss, fever, night sweats, fatigue

Examination and Assessment

- The crux is to identify:
  - Serious pathology (aka red flag conditions)
    - Fractures – due to major or minor trauma (may be associated with osteoporosis), age (>50 years old) and corticosteroid use.
    - Cancer – often presenting with a past history of cancer, ESR > 50, haematocrit < 30% and also some correlation with weight loss, age, failure to improve, prolonged pain and nocturnal pain.
    - Infection – patients may present with a fever and may have a past history of skin infections, IV catheters and UTI.
    - Ankylosing spondylitis – look for chest expansion with 4 out of 5 of: morning stiffness, improvement with exercise, onset < 40 years old, slow onset and duration of more than 3 months
    - Cauda equina syndrome – as mentioned above
  - Radicular nerve involvement
    - Leg pain > back pain
    - Narrow band of pain in lower leg or foot (in segmental NOT dermatomal distribution)
    - Numbness and paraesthesia in dermatomal distribution
    - Reduced leg reflexes
    - Positive Straight Leg Raising/ SLR test (L4-S1 roots)
    - Positive Femoral Nerve Stretch/ FNS test (L2-L4 roots)
    - Segmental weakness
    - Impulse pain with coughing or sneezing
  - Non-specific lower back pain

Investigation

- A combination of the following investigations may be helpful to identify the red flag conditions mentioned above.
  - X ray
  - FBC
  - CRP
  - Alkaline phosphate
  - Calcium
  - PSA
- Referrals may be required depending on the underlying pathology, again noting the importance of immediate emergency assessment by the hospital for patients with suspected cauda equina syndrome
- However, for most non-serious/ non-specific LBP (95% of LBP cases), X-ray is not required unless the patient shows no sign of improvement after 4 weeks. MRI is also unnecessary EXCEPT in cases with unresolving radicular pain or chronic LBP.

Management

- Address fears as fears about pain can be disabling and may distribute to disability and chronicity
- Determine beliefs and attitudes regarding condition and pain as patients may have misperceptions such as reliance on passive treatment and avoiding activity for fear of aggravating the damage, leading to poorer prognosis. It may be helpful to use the following model to explore this aspect of the patients' beliefs.
  - Feelings: what are your concerns?
  - Ideas: what do you understand is the cause of your back pain?
  - Function: how is it affecting you?

- Expectations: what do you think is needed to help?

- Provide reassurance by:
  - Offering explanations such as the biological model of pain, highlighting the nature of the injury, time required to heal, etc.
  - Assuring that there are no signs of serious disease and that most acute LBP eventually resolve (usually under 2 weeks). While relapses are possible, patients usually experience overall recovery
- Inform patients that pain occurring with movement does not indicate ongoing damage; therefore light activity is not harmful. In fact, muscle tension and spasm can be relieved with stretching and light activity. As such, encourage patients to stay active despite pain rather than waiting for pain to settle completely. If unfit for work, return to work ASAP though they may need to avoid particularly strenuous duties.
- Physiotherapy and teaching simple stretches/ exercises
- Analgesia may be required to assist mobilization
  - Paracetamol, 1g four times daily
  - Add: NSAID e.g. ibuprofen 400mg qid.
  - Add: Codeine 30-60mg 4 hourly or tramadol 50mg 6 hourly
  - ? muscle relaxants
  - Tricyclics not indicated
- Heat
- Manual therapy
- Regular review from days to weeks to develop relationship with patient, monitor progress, reinforce active participation, reassure and assess for red flags
- X-ray and blood tests (? Specialist assessment) if not resolving after 4 to 6 weeks

Additional notes

- Radicular pain
  - 50% of radicular pain resolve < 4 weeks; 90% start to improve < 6 weeks and resolve < 12 weeks. There is no need for x-rays but give adequate analgesia. If no improvement is seen over 4-6 weeks, may need:
    - x-ray
    - specialist referral
    - MRI
    - TFI (TransForaminal Injection of steroid)
- Chronic low back pain
  - Validated sources of chronic low back pain
    - Lumbar intervertebral discs – prevalence 40%
    - Zygapophyseal joints (Z joints) – 10-15% younger injured workers; 40% older non-injured population
    - Sacroiliac joints – prevalence 15-20%
  - International Spine Intervention Society (ISIS) protocols for investigating chronic LBP
    - Provocation discography
    - Zygapophyseal (facet) joint blocks
    - Sacroiliac joint blocks
  - Management strategies for chronic LBP depends on the source of the pain
    - Intervertebral disc: diagnosis, rehabilitation exercises, activity modification, surgery
    - Facet joint: intra-articular injections, medial branch nerve blocks -> radiofrequency neurotomy
    - Sacroiliac joint: pelvic mobilization, intra-articular injections
    - Centrally mediated pain: explanation, medication, exercise, psychological management

Summary

- Acute LBP is common; most patients recover in 3 months
- Serious causes are rare; excluded with careful history & examination
- No imaging if no red flags
- Exact diagnosis often not possible, nor needed
- Beliefs, attitudes and fear about pain contribute to chronicity & should be addressed
- Management includes reassurance, education & staying active
- Provide adequate analgesia

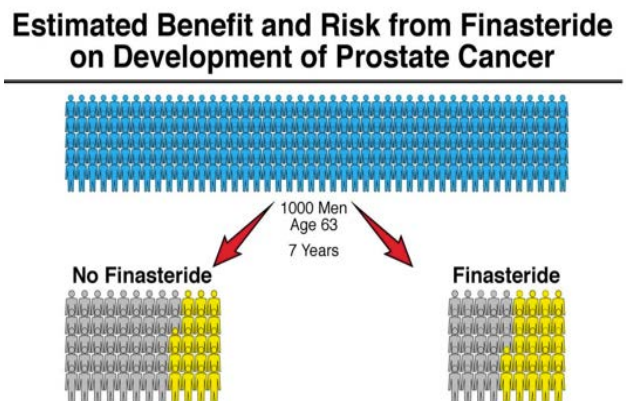
Benign Prostate Hypertropy and PSA Screening

Dr Andrew Williams FRACS

CME 19/05/2013

Treatments for Benign Prostate Hypertrophy

- Finasteride
  - » Traditionally, treatment for BPH has been finasteride.
    - Brand names: Proscar, Propecia, etc.
    - Usually given 5mg OD
    - Works by acting as a 5alpha reductase inhibitor, blocking the conversion of testosterone to dihydroxy-testosterone in peripheral tissue
    - Shrinks prostates (circa 40% in 6 months) and also stops male pattern baldness
    - Side effects include gynaecomastia (2%), abnormal ejaculation (5%) and erectile dysfunction (10%).
    - Finasteride is available on special authority to any "relevant practitioner" for patients failing alpha blocker or intolerant of alpha blocker.
    - **However**, finasteride has little effect in small prostate glands (should be > 40cc) and will also lower PSA by 50%. If PSA increases despite use of finasteride, the patient should be examined seriously regardless of PSA level. Some date also suggests that finasteride may in fact predispose to high grade prostate cancer (but reduces risk of low grade prostate cancer).



- Combination therapy
  - A few trials looking at the effects of combination therapy on BPH have been conducted, the longest and largest of which is the MTOPS (Medical Therapy of Prostatic Symptoms) study. The study enrolled 3047 randomised men according to the following criteria[1]:
    - At least 50 years of age
    - American Urological Association (AUA) symptom score of 8-30
    - Maximum urinary flow(Qmax) of 4-15 ml/sec
    - Voided volume of at least 125ml.
  - The patients were then randomly assigned to one of 4 groups receiving placebo treatment, 4-8mg/day of Doxazosin, 5mg/day of PROSCAR® (finasteride) or a combination therapy of 5mg/day PROSCAR + 4-8mg/day Doxazosin[2].
  - In summary, after following the patients for 5.5 years, the study found that risk reduction of BPH progression with a combination therapy of PROSCAR® and doxazosin was significantly greater than with either drug alone, producing a 66% risk reduction compared to placebo ($p<0.001$). PROSCAR alone led to 34% risk reduction and doxazosin alone showed 39% risk reduction compared to placebo[3].
  - The study also found that combination therapy significantly reduced the risk of AUR (Acute Urinary Retention) by

1 McConnell, J. D., Roehrborn, C. G., Bautista, O. M., Andriole, G. L., Dixon, C. M., Kusek, J. W., . . . Smith, J. A. (2003). The Long-Term Effect of Doxazosin, Finasteride, and Combination Therapy on the Clinical Progression of Benign Prostatic Hyperplasia. New England Journal of Medicine, 349(25), 2387-2398. doi: doi:10.1056/NEJMoa030656

2 Ibid.

3 Ibid.

81% compared to placebo ($p<0.001$). PROSCAR® alone reduced the risk of AUR by 68% vs. placebo while doxazosin alone did not significantly reduce the risk of AUR[4].

- In terms of risk reduction for BPH-related surgery, both combination therapy and PROSCAR alone produced significant reductions vs. placebo while doxazosin alone did not show such results.

Prostate Cancer

* The Screening Dilemma
  - Early detection tests for prostate cancer are available, including PSA, DRE, PCA-3, etc. Screening has been in place in a disorganised manner since the early 90's, which involves PSA testing in any symptomatic individual (with the exclusion of bone metastasis).
  - However, there is dilemma with screening for prostate cancer as there is dissonance between its high prevalence (most diagnosed cancer in NZ men and second most common cause of cancer death) and its relatively low mortality rate (only 1 in 5 men diagnosed with prostate cancer will die from it). Overtreatment has been rife particularly in privately based medical systems such as USA. Also, it is important to recognise that **we can not treat insignificant prostate cancer** (present in 24% of patients)!!!
  - Three large studies have been performed to investigate the benefits for prostate cancer screening, with varying screening methods, quality of design and contamination. 2 of these large studies (ERSPC and PLCO) were prematurely rushed to publication in the same month and had conflicting results.
    - While the PLCO study showed no substantial benefit of screening in terms of reducing prostate cancer deaths[5], the ERSPC study concluded that not only was prostate cancer less common in the screened group, it also carried a relative reduction in prostate cancer mortality of about 20%[6].
  - Furthermore, the ERSPC results agree with those obtained from analysing the prostate cancer mortality in the population of Tyrol, where free PSA screening was introduced in 1993. Note no other regions in Austria offered this service free of charge. As a result, analysis showed that for Tyrol from 2004 to 2008, there was a significant risk reduction of prostate cancer mortality within the 60+ age group (risk ratio 0.70) while the rest of Austria excluding Tyrol had a risk ratio of 0.92.
  - The Tyrol study however did not look into the harms caused by screening, which include:
    - Urinary retention 2-3%
    - Sepsis 1-3%
      TRUS biopsy
    - Bleeding <1%
    - Incontinence 5%
    - Erectile dysfunction 50-70%
      Prostatectomy/ EBRT
    - Stricture formation 2-10%

* USANZ screening policy
  - PSA and DRE at 40
    - If PSA < 0.5 repeat at 45 and 50 then yearly
    - If PSA > 0.5 then screen yearly
    - If PSA > 4.0 refer for biopsy.

Note results from the Malmo preven-

4 Ibid.

5 Andriole, G. L., Crawford, E. D., Grubb, R. L., Buys, S. S., Chia, D., Church, T. R., . . . Berg, C. D. (2009). Mortality Results from a Randomized Prostate-Cancer Screening Trial. New England Journal of Medicine, 360(13), 1310-1319. doi: doi:10.1056/NEJMoa0810696

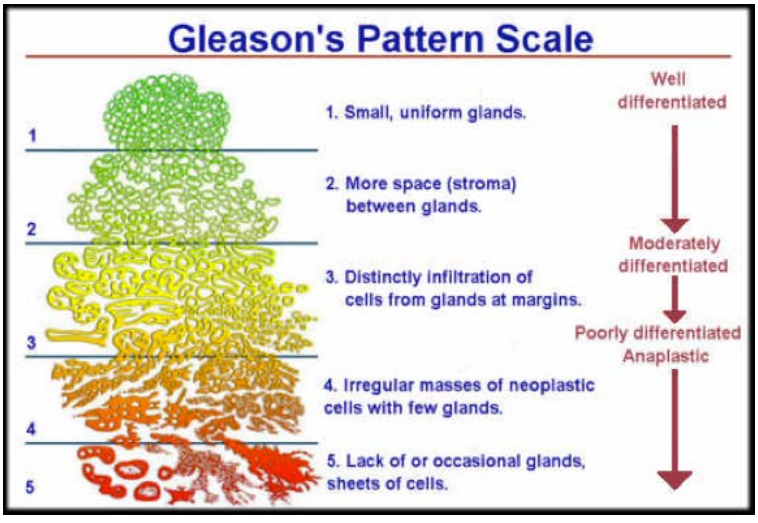
6 Schröder, F. H., Hugosson, J., Roobol, M. J., Tammela, T. L. J., Ciatto, S., Nelen, V., . . . Auvinen, A. (2009). Screening and Prostate-Cancer Mortality in a Randomized European Study. New England Journal of Medicine, 360(13), 1320-1328. doi: doi:10.1056/NEJMoa0810084

tative study suggest that PSA levels measured at 40-55 predict the risk of developing prostate cancer:

- PSA 0.5-1.0 = 2.5 x risk
- PSA 1-2 = 7 x risk
- PSA 2-3 = 17 x risk
- PSA 3+ = 39 x risk

* NZ prostate cancer workforce recommendations for referral
  - For men 40-70 years old, refer if:
    - PSA >4ng/ml
    - Palpable disease
  - For men 70-75 years old, refer if:
    - PSA >10ng/ml
    - Palpable disease
  - For men 75 + years old, refer if:
    - PSA >20ng/ml
    - Palpable disease

* Treatment
  - Factors determining treatment
    - **Gleason Score**
      - Reflects the aggressiveness of the cancer and is an important indicator of prognosis for the patient
      - The score is given as the value corresponding to the most common prostate cancer morphology plus second most common
      - A tertiary score may also be given if a small amount of aggressive prostate cancer is seen.



- PSA (<10, 10-20, >20)
- Tumour stage (T1/T2 vs T3 vs T4)
- Patient preference
- Variation in morbidity, treatment duration and salvage options.

- 10 year life expectancy in cases where treatment is indicated.
- Most of the patients requiring treatment have:
  - PSA > 10
  - Gleason 7 or higher disease.
  - Palpable disease > half of prostate

(Note some cases requiring treatment may have lower PSA, lower Gleason score and even impalpable disease so the above list is in no way a strict guideline.)

Summary

- The bottom line is that the validity of screening is dependant on the treating physician.
- Screening invariably leads to increased morbidity.
- Is low risk prostate cancer worth treating? In most circumstances no[7] (but 40% will get treated even if they choose no treatment initially)
- Prostate cancer screening will most probably continue for some time into the future.

7 Based on Dr. Andrew's personal opinion

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