



Orthopaedic Update

hip, knee & ankle arthritis

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- * **MBChB** Auckland 1993 **FRACS (orth)** 2006
- * first NZOA trainee to Hastings, 2003
- * 2 years ortho consultant Waikato 2007-8
- * returned to Hawkes Bay 2009
- * Fellowship in Surrey, UK - foot & ankle -2009-10
- * returned permanently to HB 2010
- * part-time DHB, part-time Royston

*my practice..

- *Hip, Knee & Ankle replacements :
260+ as a consultant - very good results on
NZ Joint Registry
- *Foot & Ankle sub-specialty interest
- *general orthopaedic surgeon, like all my
colleagues

* hip, knee, ankle arthritis - what's new?

- * recent hip bearing surface controversy

- * computer navigation

- * ankle replacement vs fusion

plus, cook's tour of some foot & ankle problems...

* recent hip bearing surface controversy

Jan 2012 Dom Post -

“Kiwis told hip replacements may be poisoning them”

2001 NZ Herald -

“exploding hip replacements...”

* DePuy large metal-on-metal bearing THJR

- * a good idea - closer to normal anatomy
- * BUT 'sneaked' onto market, sidestepping normal FDA approval
- * **Cobalt** and **Chromium** ion levels elevated - been here before 80s
- * Can cause significant tissue reaction - 'pseudo-tumours', with soft tissue destruction, pain.
- * BUT only 18 done in Hawkes Bay - all patients reviewed.
 - bloods, Xrays, ultrasound or MRI
 - consider revision surgery

* DePuy large metal-on-metal bearing THJR

other bearing surfaces (NB: no 'perfect joint replacement')

* metal-on-polyethylene - well-proven, 'the devil you know',
improved with cross-linking

* ceramic-on-polyethylene - very smooth, hopefully good
long-term results

* ceramic-on-ceramic - very hard and smooth; can squeak,
can fracture if trauma

* Computer Navigation for joint replacements

Marketing gimmick?

- * narrows the bell curve - brings in the 'outliers' varus/valgus
- * no real literature evidence it improves outcomes
- * does not help avoid rotational malposition of components
- * certainly not a substitute for careful planning and intra-op vigilance

*What Xrays do I order?

*the key : weightbearing for weightbearing joints

so - Hip - weightbearing AP pelvis, lateral hip

Knee - weightbearing AP, laterals, skyline patella,
45° weightbearing PA

Ankle - weightbearing AP, lateral, oblique

Foot - weightbearing AP, lateral, oblique

*Ankle arthritis

Rx cascade:

Steroid injection

Debride osteophytes - open
- arthroscopic

Fusion vs joint replacement

*Ankle arthritis

Steroid injection

done 'blind' in rooms, or by radiologist, or GA
diagnostic (local anaesthetic) & **therapeutic** (steroid)
can be repeated approx. 3-monthly
can affect diabetics' blood sugars

* Ankle arthritis

debride

Osteophytes

useful if impinging anteriorly, and joint space well-preserved

BUT risk of residual pain from within central joint

*Ankle arthritis

fusion vs replacement

both good options,
each with own advantages
& disadvantages:

*Ankle arthritis

	<u>fusion</u>	vs	<u>replacement</u>
hip	poor		very good
knee	poor		very good
ankle	very good (85-90%)		very good (80-85%)

*Ankle arthritis

fusion reliable pain relief,

BUT stiff, can overload adjacent joints.

replacement mobile, spares adjacent joints.

BUT not quite as reliable as THJR or TKJR

*Ankle arthritis

ankle replacement

stricter criteria than THJR / TKJR:

- ◆ < 90 kg
- ◆ low-demand (no 50 yr old farmers)
- ◆ no major deformity

thus much less common than THJR & TKJR

* tibialis posterior tendon insufficiency

a progressive problem... (beware ACC delays)

- TP supports medial arch of foot. 1-2 cm excursion
- important in 'push off' - powerful, locks midfoot
- becomes injured and inflamed or stretched,
then doesn't function

* tibialis posterior tendon insufficiency

initially **medial hindfoot pain**,
then early deformity (correctible),
then deformity becomes fixed, **pain moves laterally**,
arthritis in 'triple joint' develops

- treatment depends on 'where you're at' on spectrum
- can deteriorate while awaiting ACC decisions...
...then DHB waiting lists

* tibialis posterior tendon insufficiency

Treatment

- cast or arch support - can settle early stages
- debride tendon and cast
- reconstruct tendon (with FDL) and calc. osteotomy
- triple arthrodesis (fusion) - end-stage disease

* hallux valgus - 'bunion'

'bunio' = turnip

causes-

hereditary

narrow shoes .. are the enemy of women's feet

* hallux valgus - 'bunion'

classic 3 features - bunion

- dorsomedial erythema
- pronated great toe

sometimes a 'big bump'

othertimes, true hallux valgus

What troubles the patient ?

* hallux valgus - 'bunion'

NOT a 2-dimensional problem

It is a 3-D problem

the first ray goes into valgus and *elevates*

this overloads the lesser rays,
the lesser MTP joints inflame and claw

* hallux valgus - 'bunion'

think 3-D

1st ray becomes valgus and elevated
lesser MTP joints become overloaded
leads to pain, claw toes,
callus under lesser MTP joints ("ball" of foot)

* hallux valgus - 'bunion'

treatment (surgery) aimed at correcting the 3-D problem

Chevron

Scarf

Lapidus

* hallux valgus - 'bunion'

is bunion surgery painful?

the 'community received wisdom' is that bunion surgery is the **most painful operation** one can have

... used to be...

with modern regional anaesthetic **ankle block** to supplement GA, and **internal fixation**, it is very well tolerated and the patients are pleasantly surprised

*'Heel pain'

non-insertional tendinosis

retrocalcaneal bursitis

insertional tendinosis

plantar fasciitis

*'Heel pain'

think of Achilles and plantar fascia (PF) as a single unit -

if 'tight' in one, patient suffers overload & pain in the other -

ie: tight gastrocs assoc. with plantar fasciitis,

and vice versa

'tight PF' (high-arched foot) assoc. with Achilles pathology

*'Heel pain'

treatment-

GP

physio

orthotics

acupuncture

chiropractic

NSAIDs, steroid injections...

... orthopaedics - shock wave therapy, prolotherapy

surgery

*'Heel pain'

Careful examination and investigation

Xray +/- ultrasound +/-MRI

Extracorporeal shock wave therapy -

‘approx 80% of patients get 80% better’

problem - ACC / insurers not interested
- machine costs \$40,000

*'Heel pain'

Prolotherapy -

ultrasound-guided injections of tiny volumes of hypertonic solution into Achilles

can be successful

problem - again, the insurers

- need for 3-5 visits to radiologist

costs patients \$ hundreds

*Heel pain

surgery - last resort

- PMGR (proximal medial gastrocnemius release)
- debride tendon, stimulate healing
- remove Haglund deformity, if present

*Heel pain

Some "Don'ts"

Don't inject steroid into substance of TA or plantar fascia -may rupture

Don't release the plantar fascia surgically -
the arch may collapse