

A PERSPECTIVE ON THE PRACTICE OF ORTHOPAEDIC SURGERY

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May 2019

WHAT DOES AN ORTHOPAEDIC SURGEON DO?

- Surgery
- Clinics
- Teaching
- Research/evaluation
- Learn more
- Pursue other areas of interest
- (Play golf)

YEARS OF TRAINING

Medical School

6

House Surgeon

2

Registrar (non trainee)

2 – 3

Registrar (trainee)

5

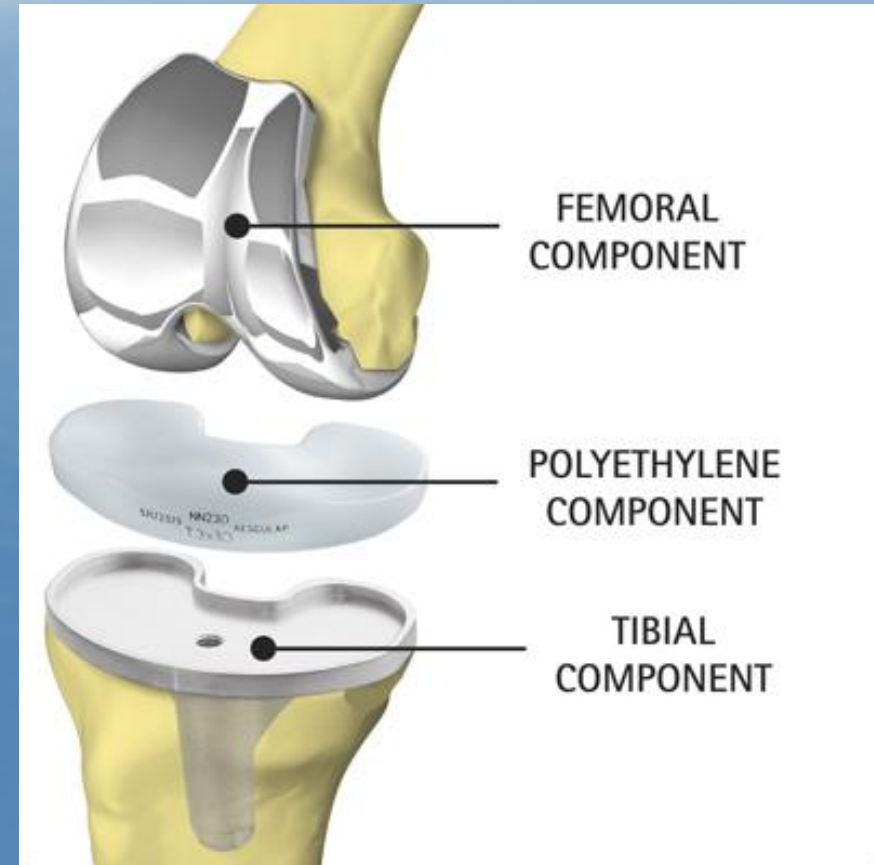
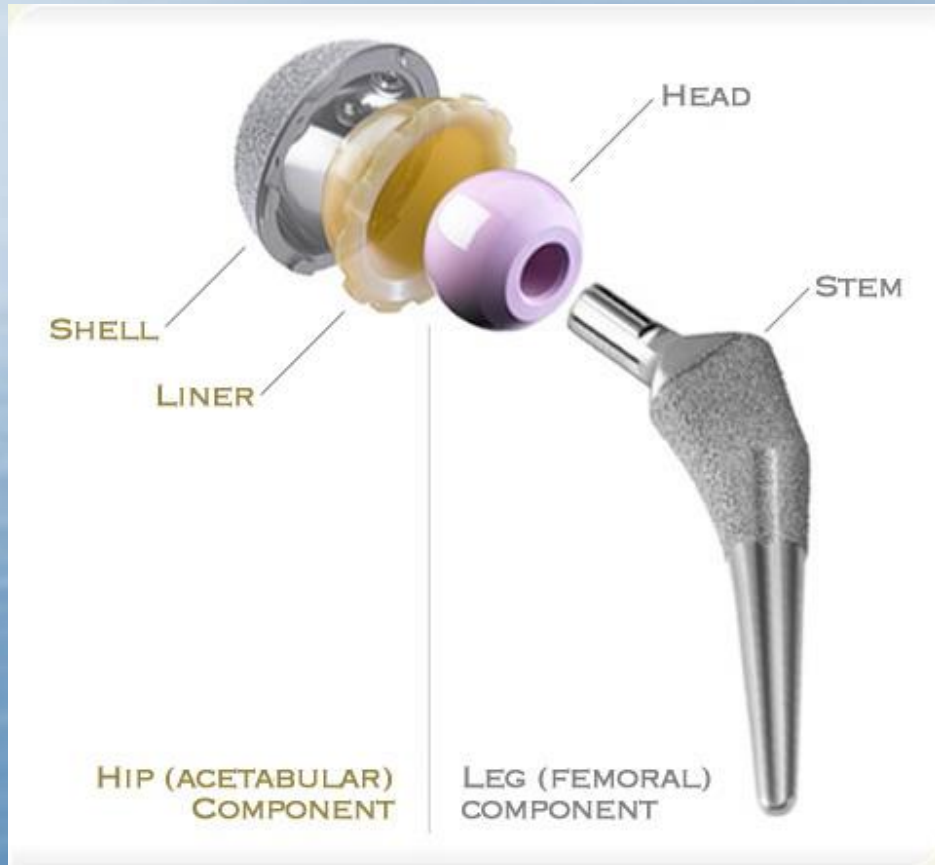
Fellow

2

17 -18

Consultant

HIP AND KNEE REPLACEMENTS



OSTEOARTHRITIS

- Affects 15% of New Zealanders
- Lifetime risk of developing OA knee is 47%
- In New Zealand there will be 1 million people > 65 years by late 2020



WHY DO PEOPLE GET OSTEOARTHRITIS?

- Mechanical factors
 - Alignment
 - Overload
- Injury
- Familial patterns
- Hard work

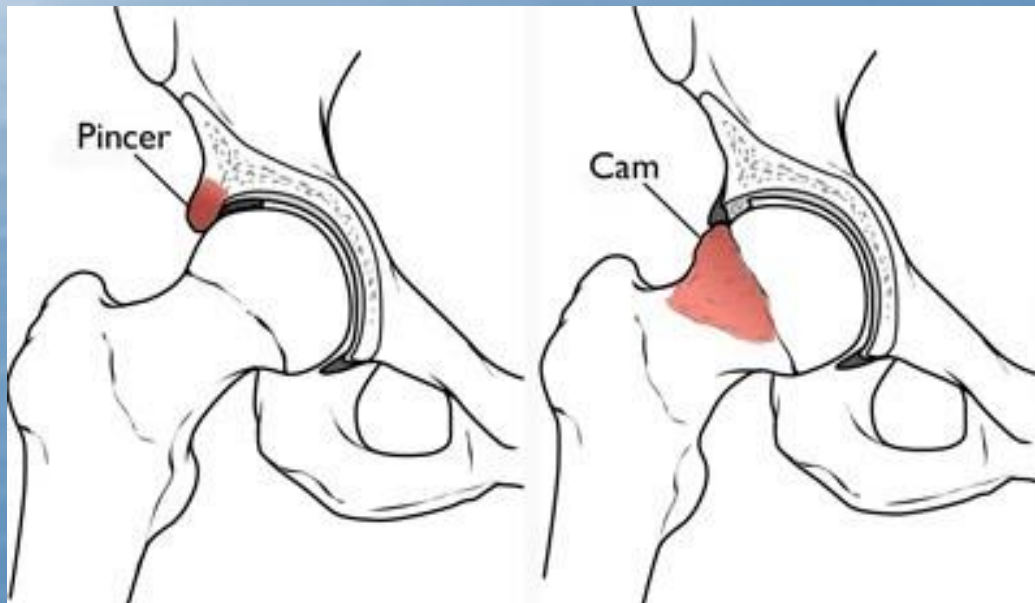


MOST KNEE OA HAS A SIGNIFICANT MECHANICAL CONTRIBUTION

MANY CAUSES OF HIP OA ARE RELATED TO MORPHOLOGY OF THE BALL AND SOCKET

- Cam impingement
- Pincer

- Shallow socket



CAN WE PREVENT OA?

- Maybe – a little.

1) Individual

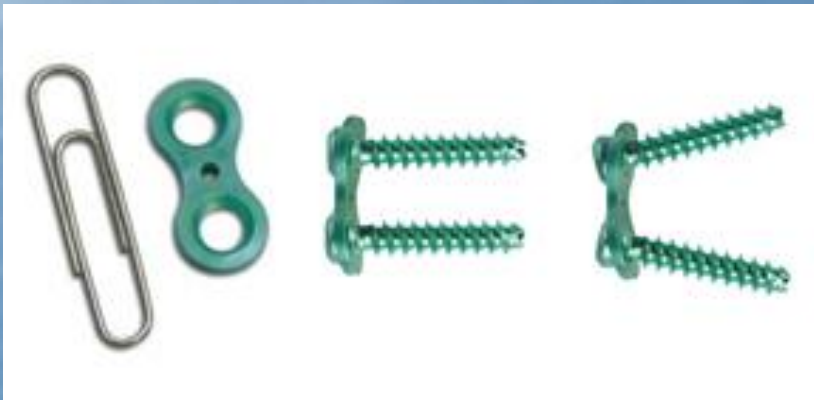
- Optimise weight
- Stay fit and strong
- Avoid injury

CAN WE PREVENT OA?

2) Improve the mechanics (earlier the better)

Realignment

- Guided growth with 8 plates



CAN WE PREVENT OA?

2) Improve the mechanics (earlier the better)

Realignment

–Osteotomy



Before HTO Surgery

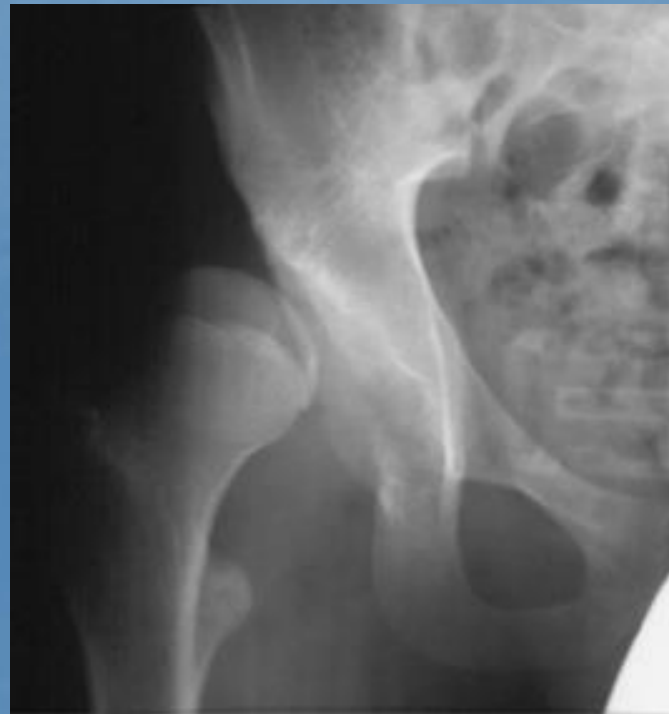


After HTO Surgery



CAN WE PREVENT OA?

- Improve the mechanics
 - Reshape the hip joint with osteotomies



CAN WE PREVENT OA?

3) Supplements

e.g. Glucosamine

Turmeric

Omega 3

Deer velvet

- Doubtful



CAN WE PREVENT OA?

- Lesser operations e.g. arthroscopy



- May improve symptoms but minimal effect in the long term.
- Beware worsening of symptoms

WHAT TO DO IF YOU HAVE OSTEOARTHRITIS

1. Individual factors

- Optimise weight
- Stay active e.g. ride a bike, swim
- Improve strength
- Do not fall into the trap of ceasing activity for fear of causing further damage



WHAT TO DO IF YOU HAVE OSTEOARTHRITIS

2. Walking aids – poles or sticks

3. Medications

- Paracetamol
- Anti-inflammatories
- Supplements

4. Surgery



Joint replacement profile for an average orthopaedic surgeon in New Zealand in one year

		2016 Totals for New Zealand
Total Hip Replacements	41	8785
Total Knee Replacements	35	7765
Partial Knee Replacements	11	838
Shoulder Replacements	13	942
Total Ankle Replacements	6	119
Total Elbow Replacements	2	39

SURVIVORSHIP OF JOINT REPLACEMENT

	15 Year Survival of Prosthesis
Hips	88%
Knees	94%
Ankles	70%

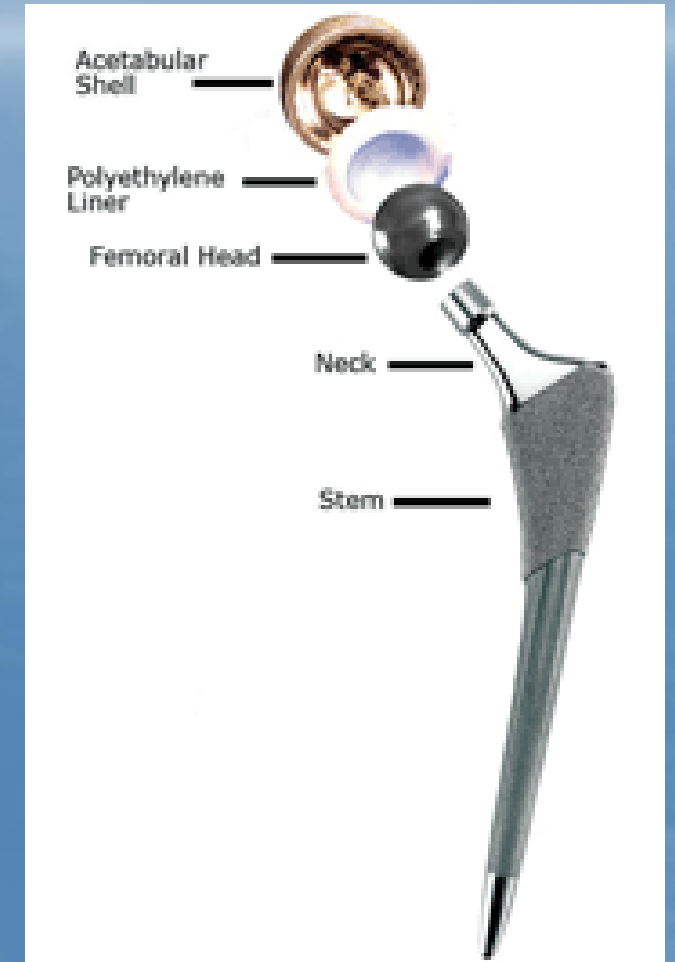
Influenced by

- Age and activity level
- Type of prosthesis
- Surgeon

WHAT IS THE BEST PROSTHESIS?

Hips

- Most acetabular components (cups) are uncemented
 - Titanium shell
 - Durable polyethylene
- Femoral components (stems) cemented or uncemented



WHAT IS THE BEST PROSTHESIS?

Knees

- Most knee replacements are fully cemented
 - Design improvements to improve stability and range of movement
 - More durable polyethylene



PROBLEMS WITH JOINT REPLACEMENTS

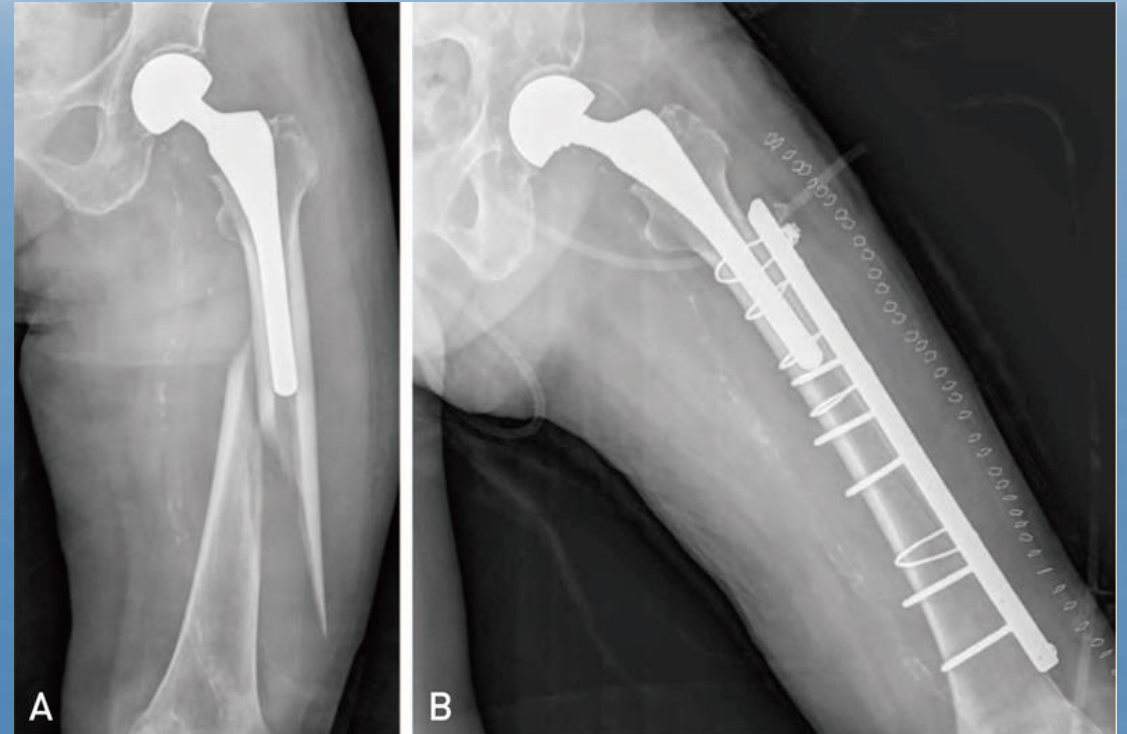
- Not all “advances” have been beneficial
e.g. metal on metal hip prosthesis
- Tried and proven may be best

Hips - Dislocation

- Fracture around the stem

Knees - Stiffness (and pain)

- Difficulty kneeling



All carry risks of infection, clots in veins, loosening

FUTURE DIRECTIONS

1. GP vs Specialist
2. Super specialisation within specialists
3. Reliance on technology
4. Mind vs Body

1. DIFFICULTIES FOR GP'S

- Access to hospital level care
- Everyone wants to see a specialist

2. SUPER SPECIALISATION

- Generalist

 - Range of activities

 - Patient can deal with the same person for different problems

 - Fits better for peripheral clinics

- Specialist

 - Greater expertise

 - Centralises services

 - Consumes more resources

3. TECHNOLOGY

- Everyone wants an MRI!
- Virtual clinics

4. MIND VS BODY

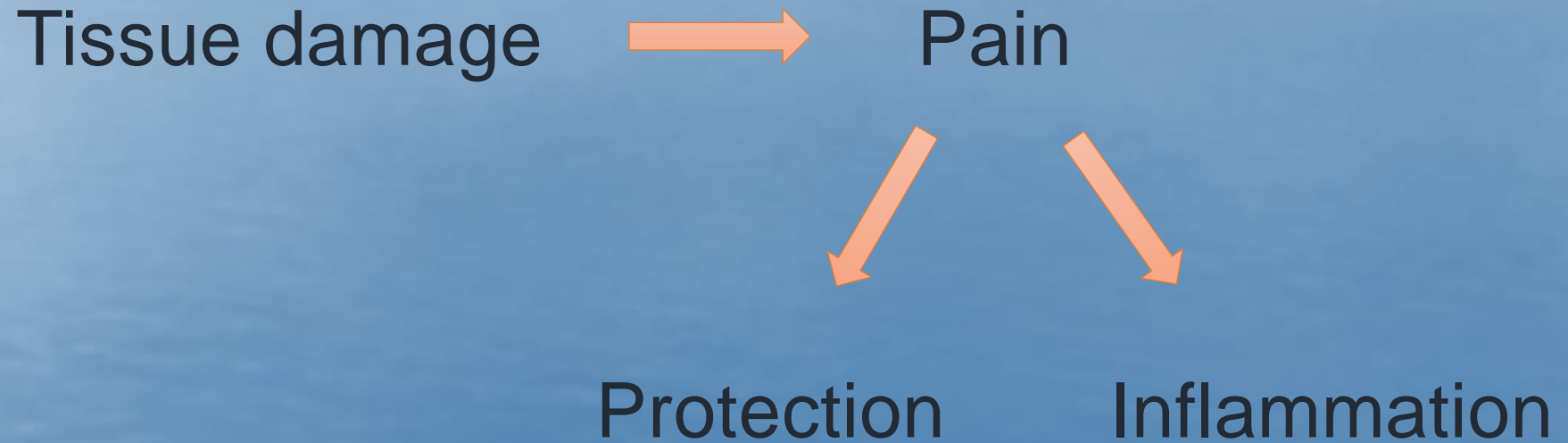
- It is impossible to separate the physical elements of illness from the psychosocial factors that contribute to the presentation. Over reliance on technology and super specialisation may lead to increasing failure to meet the needs of many patients.

MIND AND BODY IN MEDICINE

- Many patients present with symptoms which are difficult to explain or out of proportion to what might be expected from investigation.
- Prevalence up to 25 – 50% of GP consultations and hospital outpatient appointments.
- Examples
 - Abdominal pain
 - Headaches
 - Pseudo seizures
 - Chronic fatigue
 - Chronic pain/fibromyalgia

PAIN

- Everyone has automatic responses (default settings)



- Inbuilt mechanisms to keep us safe and avoid danger

CHRONIC PAIN

- Sometimes the mind/body connection gets it wrong
- Tissues may continue to send signals even after healing that the mind continues to interpret as pain

- Consequences

Continued protection → disuse and weakness

Continued inflammation → pain and swelling

Worsening disability

- Medical model for treatment

Symptoms and Signs



Investigations



Treatment



Cure

When investigations are normal this model doesn't work

Failure to respond to conventional treatment,
medications/surgery

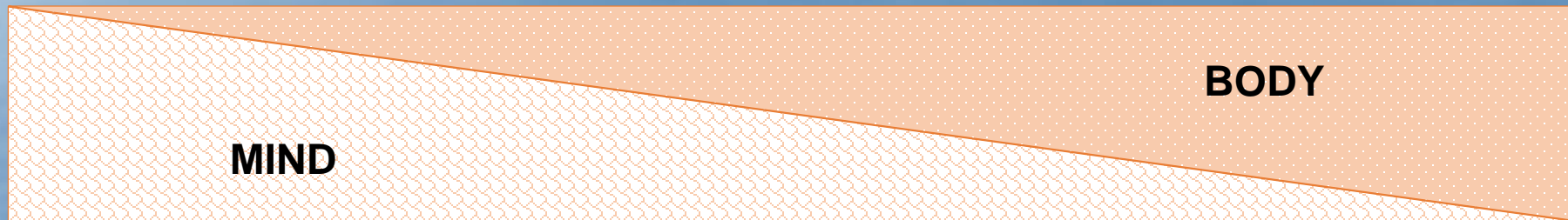
Frustration from patient and doctor

Fruitless investigations, appointments and procedures

DRIVERS OF ABNORMAL PAIN

- Stress - feeling unsafe
 - threatened
 - not in control
- Anxiety
- Uncertainty

Recognise that all symptoms lie on a continuum between mind and body



THE FUTURE

- Increase understanding and acceptance
- Teach patients and doctors to look outside the medical model
- Provide “holistic” care