ORTHOSPORTS



NEWS

ISSUE 18 | AUTUMN 2016

Welcome to the Autumn edition of Orthosports News.

Dr Ivan Popoff discusses Anterior Shoulder Instability and Dr Doron Sher presents an article on the benefits of weight loss in the management of knee osteoarthritis. Dr Kwan Yeoh completes the Hand and Wrist examination series on page 3.

Our new Category 1 – CPD module "Knee Sports Injuries" is being enthusiastically received by the GP Community. Please see future workshop dates on page 4.

We hope you enjoy this issue - The Team at Orthosports



WHO ARE WE?

Orthosports is a professional association of Orthopaedic Surgeons based in Sydney.

ORTHOSPORTS LOCATIONS

> Concord 02 9744 2666

> Hurstville 02 9580 6066

> Penrith 02 4721 7799

> Randwick 02 9399 5333

Or visit our website

www.orthosports.com.au

Treatment of **Post Traumatic Anterior Shoulder Instability**

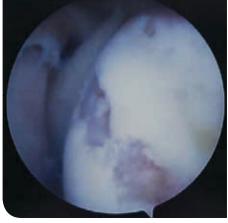


nterior shoulder instability
is often taken too lightly by
players, coaches, schools and health
professionals. It is unfortunately
a catastrophic injury which increases
the risk of developing osteoarthritis
by up to 20% (normally 0.4%)
and this increases with each
additional dislocation.

People in their teens to mid twenties have a very high risk of redislocation (70 – 95%), as do those playing contact and tackling Sports.

Traditionally a surgical stabilisation was not considered until the patient had suffered three dislocations.

Having a better understanding of the



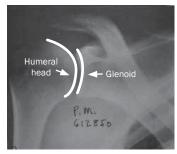
Articular cartilage damage to the humeral head in a recurrent dislocator.

natural history we now recommend surgical stabilisation in anyone likely to become a recurrent dislocator to reduce their chance of developing arthritis. This also applies to people who

are involved in activities in which a further dislocation may be life threatening e.g. ocean swimmers, surfers, rock climbers, sky divers etc.

Arthroscopic surgery is very good for the general population but it has a higher failure rate for patients involved in contact sports (30 – 50%). We may consider an open stabilisation procedure to double breast the capsule to make these high risk patients tighter and less likely to dislocate.

Any patient with significant bone loss (An engaging Hill Sachs lesion or significant Glenoid bone loss) requires a boney procedure such as a Laterjet, which involves transferring the corocoid and the attached conjoint tendon to the anterior inferior Glenoid.



Normal shoulder x-ray



Anterior/Inferior
Dislocation x-ray

The risk of recurrence decreases with age so, with patients aged late twenties to early thirties being a grey area, most other groups can be treated non operatively.

There is no evidence that immobilization in a sling for any length of time makes any difference to the recurrence rate. If the patient dislocates again they will require surgical stabilization regardless of their age. Patients who dislocate their shoulder aged over fifty, have a 50% chance of having a significant rotator cuff tear requiring surgical repair. This should be looked for if the patient has not quickly regained function with appropriate rehabilitation or who have persisting pain longer then two to three weeks post injury.

Dr Ivan Popoff



Weight loss is effective for symptomatic relief in obese patients with knee osteoarthritis

Patients who are obese have an increased risk of developing osteoarthritis, particularly of the knee. They are also more likely to have perioperative complications associated with any surgery. Obesity is a growing problem in Australia and many patients have difficulty losing weight despite about half of them recognizing that it is their weight that is the problem.

In our experience around 90% of patients have tried and failed to lose weight using current dietary recommendations. Despite having joint pain with exercise, around one third of patients have tried this. One third have tried support groups of some nature and even those that do lose weight lose much less than they would have hoped to and 97% of dieters fail to keep off any weight they have lost over a three year period.



Weight loss has been shown to provide excellent improvement in a patient's level of disability. Pain improvements tend to happen when 5% body weight loss is achieved

and improve considerably at 10% (up to a 50% reduction in pain). A great deal of motivation can be provided for the weight loss in order to prevent or delay joint replacement surgery and make it safer when it does take place.

In Australia there has been little discussion regarding the scientific basis of the current Australian dietary guidelines

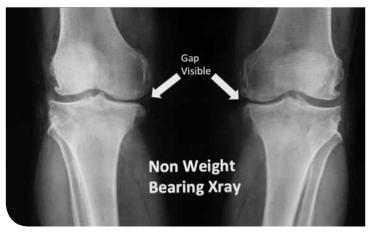
(they have tended to mirror those of the US). We are now in the situation where the Australian dietary guidelines do not take into consideration at least 5 systematic reviews which exonerate dietary saturated fats from causing harm.

Recent level one systematic reviews demonstrate that naturally sourced saturated fats do **not** increase the risk of cardiovascular disease or all-cause mortality. Other research demonstrates the safety and efficacy of reduced carbohydrate diets in enhancing health. In particular this includes reversal of atherosclerosis, reductions in blood pressure, reductions in blood sugar levels and rises in HDL (good) cholesterol. Treatment with a low carbohydrate, moderate protein and high 'good' fat diet is now becoming recognized as a safe and effective option for these obese patients. The reduction in sugar is balanced by increasing intake of green vegetables and healthy fats (not vegetable fats and oils). These are found in extra virgin olive oil, coconut oil, butter, eggs and nuts, along with full-fat plain dairy and limited fruits (such as blueberries, strawberries, rockmelon). Patients are more compliant because it is generally not necessary to weigh food or count calories. They experience lower hunger levels than before starting the diet and yet reliably and predictably lose weight.

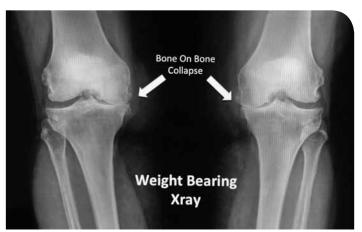
This must be implemented in a safe and controlled fashion and a thorough medical assessment to ensure suitability is required. Replacement meals, bars and shakes are **not** part of this treatment as it must be a sustainable lifestyle change for these patients, many of whom have insulin resistance or are diabetic. The benefits of carbohydrate reduction derive predominantly from a lowering of insulin levels, resulting in improved insulin sensitivity.

The metabolic, weight loss and arthritis management clinic offers this service with individualised and supervised care in a practical and cost conscious manner and is currently located at Orthosports.

Dr Doron Sher & Dr Paul Mason



Extra body weight puts extra pressure on arthritic knees





HAND & WRIST IMAGING

Part 2: Other imaging

In Part 1 of this series, we looked at plain radiographs of the hand and wrist. In this part, we'll have a brief look at other imaging modalities commonly used in the hand and wrist.

ULTRASOUND

Ultrasound is useful in the management of soft tissue lumps around the hand and wrist. It can distinguish between solid and fluid - some apparent wrist ganglia are in fact found to be tenosynovitis on ultrasound - and can be used to determine the source of a wrist ganglion.

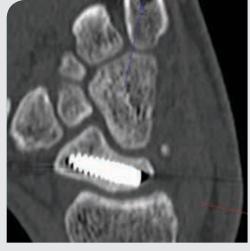
When considering aspirating a ganglion, although dorsal wrist ganglia can be generally be safely aspirated, volar wrist ganglia lie around important neurovascular structures. An ultrasound-guided aspiration and/or injection allows these critical structures to be visualised and avoided.

Generally, an ultrasound is not necessary to make a diagnosis of common tendon conditions such as de Quervain's tenosynovitis or trigger finger. However, a dynamic ultrasound may be useful in diagnosing more unusual conditions such as a subluxing ECU tendon.

CT SCAN

CT scans are usually used to gain a better understanding of the configuration of fractures in the hand and wrist. The most common are of course distal radius and scaphoid fractures. The CT may be used to identify subtle injuries that may be missed on plain X-ray or to clarify complicated fracture patterns. I also use CT scans to confirm healing of fractures which are difficult to image clearly using plain X-rays, such as scaphoid waist fractures.

CT can also be useful in managing chronic problems in certain joints, for



A CT scan gives great definition of the scaphoid in 2-dimensional slices, allowing an accurate assessment of bony union, especially in the presence of hardware that obscures the view seen on plain radiographs.

example, to better clarify the nature of osteoarthritis or to identify the presence of impinging loose bodies secondary to this arthritis.

MRI SCAN

MRI scans serve several purposes in the hand and wrist arena. The most obvious is to look at ligamentous structures around the hand and wrist. Classically, an MRI is used in a suspected acute scapholunate ligament injury or to look for a suspected TFCC tear in a patient with an unstable DRUJ after a fall. It is also commonly used to diagnose a skier's thumb injury involving the ulnar collateral ligament after a fall.

In the case of suspected fractures that are not picked up on plain X-ray or CT scan, I find MRI to be a much more useful tool than a bone/SPECT scan. This is because a nuclear medicine scan will likely identify the presence of the fracture, but not give its characteristics. An MRI allows the fracture to be more clearly delineated and the fracture pattern identified. At the same time, it will identify the presence of any nearby ligamentous injury which may be important in the patient's management.



MRI scan of the wrist demonstrates the TFCC (white arrow) as a black structure. The torn section (orange arrow) is at the attachment to the foveal portion of the ulna, causing a chronic pain on the ulnar side of the wrist.

HOW TO ORDER THESE **IMAGING STUDIES**

It is important to note that these are supplemental studies to plain radiographs. Even when suspecting purely soft tissue conditions, it is important to have a plain X-ray of the area to ensure no underlying bony or joint abnormality. I find that even CT and MRI scans, which do give some degree of bony anatomy, are not able to give enough of an overall impression or "bird's eye view" of the region.

As with X-rays, it is essential that a request for an ultrasound, CT scan or MRI scan is quite specific about the exact anatomical part to be imaged and the suspected clinical injury. This is to ensure that the radiographer and radiologist are able to obtain the correct views and sequences to give clinically relevant reports.

As with all imaging, the results must be taken in a clinical context. The imaged pathology must be married with the patient's symptoms and signs in order to give an accurate diagnosis and to help plan a management course.

Dr Kwan Yeoh



Orthopaedic Surgeons and their Interests

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Dr John Negrine	Foot & Ankle (Adult)
Dr Rodney Pattinson	Paediatrics and General Orthopaedics
Dr Ivan Popoff	Shoulder, Knee and Elbow
Dr Allen Turnbull	Hip and Knee
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Dr Ivan Popoff	Shoulder, Knee and Elbow
Dr Doron Sher	Knee, Shoulder and Elbow

Sport & Exercise Medicine Physicians

Dr Paul Annett	Hurstville
Dr John Best	Randwick
Dr Mel Cusi	Concord Hurstville Randwick

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Our Category 1 modules are designed to offer flexibility and educational hands on learning.

■ 3 hours of convenient online learning and ■ 3 hours of workshop time (6.30pm-9.30pm)

CATEGORY 1 MODULES (40 CPD POINTS)

Knee Sports Injuries (NEW) – 40 Category 1 CPD Points

Concord: Tuesday, 14th June Randwick: Thursday 7th April Randwick: Wednesday, 25th May

Hurstville: TBA

Shoulder Pain & Injury Management – 40 Category 1 CPD Points

Concord: Tuesday, 5th April Randwick: Wednesday, 11th May

Hurstville: TBA Penrith: TBA



To register your interest or for more information please email education@orthosports.com.au

SOME COMMENTS RECEIVED FROM GPS:

"An excellent meeting. It was among the best I have ever attended."

"I was very impressed by both the online and face to face components and found it very useful in updating my knowledge."

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