



ISSUE 04 | AUTUMN 2011

ORTHOSPORTS LOCATIONS

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- > Randwick 02 9399 5333
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Or visit our website

www.orthosports.com.au

WHO ARE WE?

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

We specialise in joint replacement, arthroscopic and reconstructive surgery.

Orthosports also includes a team of Sport & Exercise Medicine Physicians who are dedicated to promoting excellence in the treatment of musculoskeletal disorders in both adults and children.

Our team of surgeons has particular expertise in hip and knee replacement, ACL Reconstruction, knee and shoulder arthroscopy, open shoulder surgery, trauma, foot and ankle surgery, fracture management, paediatrics and many subspecialist procedures.

All of our practices are conveniently located next to physiotherapy, x-ray and imaging facilities.

Our mission is to have the facilities to offer everything our patients may need but also to be small enough to look after the little details that make all the difference to patient care.

OUR WEBSITE IS YOUR ORTHOPAEDIC RESOURCE

If you haven't visited our website recently, please take the time to visit and take a look around. It contains descriptions of many common surgical conditions and procedures as well as lectures, animations and videos of lectures given by our surgeons and sports physicians over recent years.

www.orthosports.com.au

Welcome to the first Issue of Orthosports News for 2011

As the long days of Summer move behind us and the cooler weather of Autumn approaches, we are preparing for the busy winter sporting season ahead. We hope our newsletter will be helpful with any extra information you may need for this hectic time of the year.

Part 3 of our knee examination series is included on page 2 plus Dr John Negrine's personal view on Obesity and the Foot and Ankle in Orthopaedics.

We hope you enjoy this issue of Orthosports News. Cheers, **The Team at Orthosports**

Imaging in Shoulder Conditions

Deciding which imaging modality to use when a patient presents with a painful shoulder is often difficult.

In my opinion every patient requires a plain x-ray. This will show up any bony pathology. It gives some idea as to bony morphology, particularly any acromial spur, which may predispose to impingement or rotator cuff tears. It will show up any calcification of the rotator cuff and exclude arthritic changes. In instability patients it will show up any bony pathology such as a bony bankart lesion or a Hill Sachs lesion. Most importantly it will show any bony tumour, in particular a bony secondary in the older patient, or fracture.

I find ultrasound examinations particularly inaccurate and often misleading. Our published study (1) revealed an accuracy rate of under 40% for rotator cuff pathology. If you do order an ultrasound I suggest you do not solely rely on its interpretation, but be guided by the history and clinical signs of your examination.

CT scans are useful in assessing bony pathology such as tumours, bone loss secondary to chronic instability and erosive arthritis and may be required preoperatively in fracture fixation cases.

MRI's are very helpful in determining any soft tissue pathology, such as rotator cuff and labral tears. They are also very expensive and should not be ordered unless there is a diagnostic dilemma or surgery is contemplated. It is not an alternative for a proper physical examination. I always order an MRI with intraarticular (not intravenous) contrast. This improves the accuracy rate of the MRI from 85% to close to 100%. The contrast is particularly important when assessing labral pathology.

1. J. GOLDBERG et al; ROLE OF COMMUNITY DIAGNOSTIC ULTRASOUND EXAMINATION IN THE DIAGNOSIS OF FULL THICKNESS ROTATOR CUFF TEARS. ANZ Journal of Surgery 2003; 73: 797 - 799

Dr Jerome Goldberg



Images from left to right:

Plain x-ray showing a bony Bankart & Hill Sachs lesion.

3D CT showing the glenoid with the humeral head extracted. There is loss of the anterior glenoid secondary to recurrent dislocation.

MRI showing full thickness tear of supraspinatus.

ORTHOSPORTS CONCORD UPGRADE COMPLETE!

The renovation of the Orthosports offices on Burwood Road is now complete. The upgrades allow improved patient care and comfort as well as offering ongoing radiology and physiotherapy services.



Surgeons consulting from Concord:

Dr David Dilley, Dr Todd Gothelf,
Dr John Negrine, Dr Rodney Pattinson,
Dr Doron Sher.

Sports & Exercise Medicine Physician:

Dr Mel Cusi

Medicolegal:

Dr Rick Honner

Patella Dislocation

Patella dislocation usually results from a twisting injury or a direct blow to the knee with the joint in slight flexion. The injury is painful and may cause the patient to fall to the ground.

The patella can reduce itself as the person tries to straighten their knee but more commonly is observed as a prominent bulge on the lateral margin of the knee. The medial condyle is uncovered and may be mistaken for the displaced patella (Medial dislocation is extremely uncommon and is usually a complication of surgery for recurrent dislocation). When the patella dislocates the knee is swollen and neither active nor passive movement is possible. The knee is usually in a flexed position when the patient presents for acute treatment.

Patella dislocation can be caused by (1) Abnormal forces on a normal patellofemoral joint OR by (2) Normal forces on an abnormal joint. Recurrence of the dislocation without surgery is common with more than half of the patients having significant activity restrictions. Having a dislocation doubles the risk of patellofemoral arthritis over 15 years. Teenagers are 5 times more likely to dislocate their patella than adults and females are more likely to dislocate than males.

Factors that may predispose to dislocation include:

- generalised ligamentous laxity;
- a small lateral femoral condyle (relative to opposing tibial condyle);
- a small intercondylar groove;
- a small and/or high riding patella;
- a significant genu valgum deformity;
- quadriceps weakness - but it is possible to dislocate a 'normal' patella as well.

It is usually worthwhile trying a gentle reduction maneuver for an acute dislocation since the diagnosis is usually obvious.

Simply straightening out the knee and (if necessary) applying a gentle medial force to the patella will reduce the joint and provide immediate pain relief for the patient. It is essential that all patients have an x-ray including a skyline patella or Merchant view.

If the x-ray is performed with the patella still dislocated it will confirm the lateral displacement and in about 5% of cases, reveals an associated osteochondral fracture. When the history is suggestive of a dislocation which has reduced itself an x-ray must still be performed. CT scanning is useful when planning surgery but is rarely used in the initial stages of diagnosis and treatment. MRI is very useful for looking at soft tissue and chondral injuries.

Once reduced the patient will usually have a haemarthrosis and be very tender at the medial edge of the patella where the soft tissue structures have torn. They will be reluctant to flex the knee and have a positive patella apprehension test (refer to part 3 of our Knee Examination Series in this newsletter).

If the dislocation has taken place in an otherwise normal knee and the patient is a regular sports participant it is becoming more common to repair the structures that have been torn to allow a more reliable return to sport. If the patient leads a sedentary lifestyle I recommend immobilizing the knee in a firm supporting bandage and Zimmer splint for 3 weeks with the leg extended with full weight bearing allowed. Once the splint is removed, physiotherapy should be started immediately to strengthen the quadriceps muscles to try to prevent further dislocations.

If the dislocation takes place in an abnormal knee (recurrent dislocator) it is important to work out where the pathology is that is causing the dislocation. Non-operative treatments are always attempted first but surgery is often required. On the whole surgery works well to prevent further dislocations because skeletal and muscular components of the patellofemoral joint and extensor mechanism are realigned. Surgical treatment options include:

- release of lateral structures
- repair or reconstruction of medial structures
- transfer of the tibial tubercle medially/ anteriorly/distally to realign the pull of the quadriceps

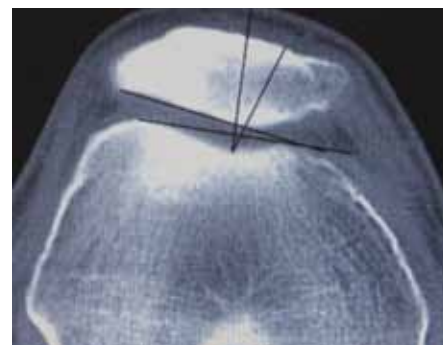
If there is an osteochondral fracture surgery is almost always required. Small osteochondral fragments are usually removed but large ones are fixed back into position where possible.

Patella dislocation is common. Reduction of an acute dislocation can usually be achieved simply by straightening the knee. Check to see if there are predisposing factors to make recurrent dislocation more likely and arrange an x-ray. Recurrent dislocators are only operated on when their day to day life is being interfered with. Most first time dislocators are treated in an extension split followed by physiotherapy but surgery to repair or reconstruct the medial patellofemoral ligament is becoming more common.

Dr Doron Sher



Dislocated Patella



Normal Patella



A sub-group of Orthosports, The Sydney Shoulder Clinic is a specialist shoulder service providing clinical care in physiotherapy, sport & exercise medicine and orthopaedic surgery.

www.sydneyshoulderclinic.com.au

Spotlight on Dr Ivan Popoff



Dr Popoff is a Shoulder, Knee and Elbow Surgeon with a special interest in arthroscopic (keyhole) and open soft tissue reconstruction surgery and arthroplasty. He completed the Orthopaedic Training Scheme (Sydney) in 2002, before completing Fellowships in Knee Surgery with Dr Craig Waller in Sydney and Shoulder and Knee Surgery with Professor Bill Stanish at Dalhousie University Halifax Canada.

He has degrees in Medicine and Physical Education from Otago University New Zealand. He is interested in both non-operative and operative management of shoulder, knee and elbow problems. He is published in International Journals and is currently involved in research and teaching.

Dr Popoff consults from Hurstville and Randwick.

KEY EXAMINATION POINTS



EXAMINING THE FRONT OF THE KNEE

Having examined the patient for an effusion, meniscal tear and instability (see previous newsletters and article on Patella Dislocation opposite) we move on to the front of the knee.

The patient may describe knee pain with walking up or down slopes or stairs or with running or jumping. They may have the sensation that the patella moves out of joint, clicking, grinding or locking and may feel pain when sitting for extended periods of time.

Inspect the front of the knee with the patient standing looking for a high (alta) or low (baja) patella which may lead to instability or overuse respectively. In the standing position, ask the patient to contract their quadriceps and identify the size and tone of the VMO (vastus medialis obliquus, medial and superior to the patella). Ask the patient to carefully squat – initially with both legs, then with one leg. A painful squat is significant. As a general rule patients who have pain squatting at less than 90 degrees of knee flexion have difficulty negotiating stairs. On the whole the patient should avoid lunges and deep squats which tend to aggravate this condition.

With the patient sitting, look for ‘grasshopper’ patellae indicating lateral tracking and perhaps instability. The tibial tubercle may be very prominent from previous Osgood Schlatters disease (Adolescents may have apophysitis with fragmentation of the accessory ossification centre of the tibial tubercle and while it is painful at the time, it results in a painless lump in the long term).

Listen and feel for crepitus as the patient takes their knee through a range of motion. Check the other knee as this may be bilateral and asymptomatic. Check also for lateral tracking of the patella as the knee reaches full extension.

Palpate each structure around and attached to the patella. The Patellar tendon may be tender at its insertion onto the patella (usually medially) or more distally (patella tendonitis or Sinding-Larsen-Johansson syndrome). The patient will complain of pain in the patellar tendon and pain with resistance against extension or performing a squat. The patella tendon may be the site of repetitive strain injuries (jumper’s knee) and is often associated with tight hamstrings.

Palpate the patella itself, there may be tenderness of the bone or more likely the soft tissues attached medially which tear with a patella dislocation.

Patellar tilt: Hold the edge of the patella between your thumb and index finger and find the axis of the patella. See if this is parallel to the horizontal plane and try to lift first the medial and then the lateral side of the patella. An increased tilt medially can be caused by a medial retinacular tear and a decreased tilt laterally can be associated with patella instability.

The patella may be said to squint (convergent or divergent squint). Broadly speaking, a convergent squint tends to occur in anterior knee pain syndrome, while a divergent squint would be more likely in recurrent dislocation.

APPREHENSION SIGN

The patient is positioned supine, with the knee flexed between 0° and 30°. The examiner gently but firmly pushes the patella in a lateral direction. The patient usually stops the examiner because they are worried the patella may dislocate (In this position the patella is at its highest point in the femoral groove (trochlea). Pressure from the medial side will push the patella in a lateral direction, causing it to sublux or dislocate from the groove).

CONCLUSION

Non surgical treatment is the mainstay of treatment for most anterior knee pain with a hamstring stretching quadriceps strengthening programme. If this fails surgery may be indicated.

Dr Doron Sher

Obesity and the Foot and Ankle | Personal viewpoint

Everyday in our offices, clinics and operating theatres around the country we as doctors are witnessing the effects of the obesity epidemic. Obesity is defined as a body mass index greater than 30 kg/m² and being overweight 25 – 30 kg/m². What does this mean? Your average 1.8m (6ft tall orthopaedic surgeon) who weighs 81 kg has a body mass index of 25....at 97kg his body mass index rises to 30 and he (or she!) is defined as obese.

It is estimated that in Australia 33% of adults are overweight and 16% of people are obese. These patients have a higher incidence of type 2 diabetes and there are plenty of them...over 2.5 million in this country. Diseases in the foot and ankle specifically known to be associated with increased weight are posterior tibial tendon rupture, Achilles tendinosis, diabetes and diabetic neuropathy and every foot surgeon’s favourite: plantar fasciitis!! Sir William Osler said that “Prevention is the pinnacle of the physician’s art, but late treatment is what we do most often.”

I feel that it is imperative to take a hard line with these patients and (in as a diplomatic a way as is possible) counsel them to abandon the donuts for the treadmill. It is well known that they will not lose weight after orthopaedic operations (a study looked at weight before and after hip replacement surgery and found that patients despite having less pain tended to maintain their pre-surgery weight).The formula is relatively simple....eat less and exercise more. Patients need to be referred to dietitians or to weight loss clinics.

Bariatric surgery must surely be one of the greatest advances in modern times. Sadly it is massively on the increase (600% increase in the USA 1993 – 2003). The average patient undergoing the surgery in the USA is female aged in her late 30’s and weighs in excess of 136 kg). The patient’s overall health and well being will benefit greatly from this intervention as just about every condition varying from depression to heart disease is more common in obese patients.

Dr John Negrine

Non-surgical treatment of neck osteoarthritis

Cervical spine degeneration is a common cause of neck pain, especially in the older population. It is characterized by pain and stiffness and responds temporarily to heat and gentle mobilisation. Crepitus on rotation is common.

It is important to remember that signs of cervical degeneration (spondylosis) do not correlate well with clinical symptoms.

Moderately severe pain is compatible with minimal imaging changes, whereas patients with advanced degeneration of the cervical spine may have almost no symptoms.

Surgery is only indicated in cases of instability or neural compression. Chronic disc degeneration does not require surgery unless there is neural compression of either the cord or peripheral nerve roots.

Anti-inflammatory medication and analgesics are indicated for symptom control. Analgesics should be taken on a regular basis (every 4 hours) rather than p.r.n., until symptoms are controlled. Only then can the dosage and/or the frequency be tailored down.

NSAIDS need to be administered with the usual precautions, especially in the elderly.

Postural training affords the least strain on facet joints. “*stay with the neck long*”, and nod slightly through a coronal axis placed over the tip of the mastoid processes. Useful clues for patients can be “*tuck the chin in without making a double chin*” or “*imagine bringing the bridge of the nose to the back of the head*”. This reduces slightly the excessive cervical kyphosis, strengthens deep posterior muscles and stretches the more superficial ones, which are usually hyperactive.

Dr Mel Cusi

Orthopaedic Surgeons and their Interests

LOCATION	SURGEON	SPECIALTY
CONCORD 47-49 Burwood Road, Concord NSW 2137 Tel: 02 9744 2666	Dr Todd Gothelf	Shoulder, Foot & Ankle
	Dr John Negrine	Foot & Ankle (Adult)
	Dr Rodney Pattinson	Paediatrics and General Orthopaedics
	Dr Doron Sher	Knee, Shoulder and Elbow
HURSTVILLE 2 Pearl Street, Hurstville NSW 2220 Tel: 02 9580 6066	Prof. Warwick Bruce	Hip and Knee
	Dr Jerome Goldberg	Shoulder
	Dr Todd Gothelf	Shoulder, Foot & Ankle
	Dr Andreas Loeffler	Spine, Trauma, Hip and Knee
	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
OLYMPIC PARK Retail 4, 8 Australia Ave Sydney Olympic Park NSW 2127 Tel: 02 9735 3637	Prof. Warwick Bruce	Hip and Knee
	Dr John Trantalís	Shoulder and Elbow
	Dr Peter Walker	Hip and Knee
PENRITH Level 3, 1a Barber Avenue, Kingswood NSW 2747 Tel: 02 4721 1865	Dr Todd Gothelf	Shoulder, Foot & Ankle
RANDWICK 160 Belmore Road, Randwick NSW 2031 Tel: 02 9399 5333	Dr Jerome Goldberg	Shoulder
	Dr Todd Gothelf	Shoulder, Foot & Ankle
	Dr Andreas Loeffler	Spine, Trauma, Hip and Knee
	Dr John Negrine	Foot & Ankle (Adult)
	Dr Rodney Pattinson	Paediatrics and General Orthopaedics
	Dr Ivan Popoff	Shoulder, Knee and Elbow
	Dr Doron Sher	Knee, Shoulder and Elbow
	Dr John Trantalís	Shoulder and Elbow
SYDNEY Level 3, 187 Macquarie Street, Sydney NSW 2000 Tel: 02 9735 3637	Dr Peter Walker	Hip and Knee

Sport & Exercise Medicine Physicians

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

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