ARIZONA ORTHOPEDIC & FRACTURE SURGEONS
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AOFS OPENS GLENDALE OFFICE

Arizona Orthopedic and Fracture Surgeons opened their new Glendale Office on March 1, 2008, providing a full orthopedic surgical service, a podiatric medical and surgical service, and full digital radiographic capabilities. With seven medical providers and nine treatment rooms, the appointment waiting time is minimal and orthopedic and podiatry appointments are available.

The Glendale Office is easily accessible from the cities of northern Maricopa County, area hospitals, and urgent care facilities. Located just north of the North Loop 101 Freeway at 51st Avenue, the office is situated in the professional building complex's south concourse. The office is handicap accessible.

Patients and physicians needing information or to set up a consultation should contact the Central Appointments Office at (602) 230-1400 during office hours between 8 AM to 4 PM, Monday to Thursday, 8 AM to 3 PM, Friday.

DR. DAVID VAN De WYNGAERDE JOINS ARIZONA ORTHOPEDIC & FRACTURE SURGEONS

Dr. David Van De Wyngaerde merged his orthopedic practice with the Arizona Orthopedic and Fracture Surgeons in the summer of 2007.

Dr Van De Wyngaerde started his Phoenix orthopedic practice in 1993 when he joined his father, Dr George A. Van De Wyngaerde and continued in this practice until his father's retirement.

Dr Van De Wyngaerde attended Colorado College and The University of Arizona Medical School. He did his residency in Orthopedic Surgery at University Medical Center, University of Arizona.

David has special interest in general orthopedics, joint replacement, joint arthroscopy, sports medicine, and orthopedic trauma.

David is married to Pamela and has four daughters aged 15 to 21. He and his family are very active in civic activities. He enjoys sailing, hiking and more recently, building and flying radio controlled gliders.

Dr Van De Wyngaerde is accepting patients in both the office and hospital settings. He is also on the AOFS call schedule. He is available as a lecturer for educational meeting and in-services to both professional and civic audiences.

David Van De Wyngaerde

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ARIZONA ORTHOPEDIC & FRACTURE SURGEONS

Spring Newsletter

SPRING INJURIES

By Steven R. Kassman, M.D.

There are several common injuries associated with snow and water skiing , snowboarding and rollerblading, and less common ones unique to spring and summer sports.

Common injuries that often result from these high velocity sports are anterior cruciate ligament tears, and distal radius and/or wrist fractures involving the scaphoid (aka navicular) bone.

Less common injuries are the "gamekeeper's thumb" and fractures involving the anterior process of the talus.

Anterior cruciate ligament tears are commonly associated with skiing and snowboarding and to a lesser degree rollerblading. Typically, patients describe a twisting knee injury during a fall, possibly associated with a "pop" or sense of subluxation. Patients report abrupt knee swelling over several hours following the injury. This abrupt swelling is different from the less severe swelling seen after meniscus injuries. Patients who present with a significant twisting injury to the knee and obvious swelling require additional diagnostic evaluation.

Knee x-rays are routinely negative other than the occasional comment of an effusion. In this case, non-contrast MRI is the diagnostic test of choice. It is nearly 100% sensitive for ACL tears and provides highly accurate information about other possible diagnoses such as occult fracture or meniscus tears.

Fractures of the distal radius and carpal scaphoid are secondary to falls onto an outstretched hand. Pain and swelling vary from moderate to severe and there may be a visible deformity.

Radiographs are diagnostic for distal radius fractures but may miss non-displaced scaphoid fractures. The clinical tip-offs for a scaphoid fracture are swelling, usually about the dorsal and radial aspect of the wrist and tenderness in the "anatomic

IS IT A WART OR CORN OR CALLOUS

By Sanford M. Chesler, D.P.M.

A painful dermal foot area, an unexplained discrete skin lesion, or a thickening of skin can indicate a biomechanical defect such as in flexible pes planus, the effects of a metabolic or viral disease such as diabetes, rheumatoid arthritis or cancer, or a form of hyperkeratotic skin disease.

When the rearfoot is unstable, ground reactive forces can adversely affect the function and stability of the forefoot. These forces produce transverse plane sheer and sagittal plane over-compression on both osseous and soft tissue.

The skin reaction to these abnormal pressures is to thicken the skin, protecting the deeper structures. Two types of lesions occur. A shearing callous is diffuse with no distinct central core. A nucleated corn has a superficial hyperkeratosis usually on pressure points.

Skin lesions with irregular borders, varying color and raised borders may be cancerous and require biopsy.

Skin lesion with regular borders, a central halo with "seeds", and hyperkeratosis indicate a possible wart.

Medial to lateral pressure causes pain indicated a wart whereas vertical pressure pain indicates a nucleated hyperkeratotic lesions such as porokeratosis, hard corn, foreign body keratoma, or a plugged sweat duct.

In any event, debridement of the hyperkeratotic epidermis is necessary to fully appreciate the morphology of the skin lesion.

Biopsy the lesion when clinical diagnosis is unclear especially when malignancy is suspected. I recommend a dermato-pathology specialty lab for this evaluation.

SPRING INJURIES—CONT.

snuffbox" between the abductor tendons of the thumb.

Patients who have these findings should either be immobilized in a thumb spica splint or cast with repeat x-rays, including "scaphoid" view in 14 days or immediately referred for MRI to exclude occult fracture.

The "gamekeeper's thumb" results when the patient falls with the thumb spread away from the other digits.

The "gamekeeper's thumb" presents with pain and swelling at the base of the thumb with tenderness over the ulnar side of the metacarpal-phalangeal joint.

There is severe pain and clinical laxity when valgus or abduction type stress is applied to the joint. X-rays may demonstrate "an avulsion fracture" from the base of the metacarpal.

Fractures involving the anterior process of the talus are uncommon except in snowboarding. The anterior process is located at the lateral aspect of the talus . Patients complain of pain and swelling about the anterior/lateral aspect of the ankle similar to a "simple ankle sprain".

A high index of suspicion is needed when evaluating "ankle sprains" in snowboarders. Tenderness and swelling about the antero-lateral ankle may be indistinguishable from an uncomplicated sprain. Ankle x-rays are frequently non-diagnostic and a CT scan of the ankle would be the diagnostic test of choice.

Treatment of ACL tears can be surgical or non-surgical. The ligament never heals once it is torn, even if immobilized. Immobilization is contraindicated, due to risk of post-traumatic stiffness, other than for a brief period as an adjunct to acute pain control. The decision to surgically reconstruct the ACL is influenced by associated injuries and the patient's lifestyle expectations. Most patients who desire a return to athletic activities that involve cutting, pivoting, and twisting will not be able to do so without surgical reconstruction. Patients with sedentary non-athletic lifestyles might be managed effectively with rehabilitation and bracing. Those patients whose knees feel unstable or have significant associated meniscal or chondral injuries require surgery. 90% of patients treated surgically are capable of returning to all desired activities with little restriction.

Distal radius fractures may or may not require surgical reduction and stabilization. Current operative fixation techniques can be safely performed on an outpatient basis and patients can begin early motion and rehabilitation within a week of surgery.

Non-displaced scaphoid fractures may be treated with 8 weeks of cast immobilization. Operative stabilization can lead to earlier return of function and is always necessary for displaced fractures. Missed fractures typically progress to non-unions with significant risk for post-traumatic wrist arthritis.

The "gamekeeper's thumb" is usually a clinical diagnosis and commonly requires surgical repair unless it is associated with a non-displaced avulsion fracture in which case non-operative treatment with a thumb spica cast is adequate.

Anterior process talus fractures almost always require surgical reduction, otherwise chronic pain and post-traumatic arthritis are common.

DR KASSMAN

Are you using the correct x-ray view for shoulder injuries?
By Lillian Berry, P.A.-C

When your patient complains of "shoulder pain", your differential diagnosis of common causes include:

1) impingement syndrome and rotator cuff disease
2) rotator cuff calcific tendonitis
3) biceps tendonitis
4) superior labral anterior posterior (SLAP) lesions.

Standard plain radiographs can be helpful in depicting anatomic variants or calcific deposits. They are specifically useful in ruling out calcific tendonitis and predisposing factors such as Type I-III acromion or AC joint arthritis. The AP view with the arm at 30 degrees external rotation, the outlet Y view and the axillary view are best to visualize this area.

The outlet Y view is useful because it shows the subacromial space and can differentiate the acromion process. The axillary view is helpful in visualizing the acromion and the coracoid process as well as any coracoacromial ligament calcification. The AP view is also excellent for assessing the glenohumeral joint, subacromial osteophytes, and sclerosis of

MRIs are generally 95% sensitive and specific in detecting complete and partial rotator cuff tears, cuff degeneration, and chronic tendonitis.

MRI arthrography reliably identifies full thickness rotator cuff and labral tears.

CT scanning may be useful in diagnosing subtle dislocation, alignment of fractures, healing status of fractures and avascular necrosis.

Ultrasound imaging of the shoulder is ordered if the patient is unable to have a MRI. Untrasound imaging can help diagnose complete rotator cuff tears.

WOUND HEALING BY SANFORD M. CHESLER, D.P.M.

WOUND MOISTURE CONTROL "THE KEY TO SUCCESS"

Wounds from any source present differently from their inception to the time its treatment begins. The environment within and around the wound dictate the initial treatment modalities and dressings.

Initially wounds are moist with body fluids and contaminants such as blood, chemicals, clothing debris and foreign bodies. The primary focus is controlling of wound hemorrhages. Secondly is removing foreign debris and devitalized tissue reduces the bioburden and assist cellular level auto-debridement. Thirdly is the selection of treatment modalities such as topical medications, moisture control wound management dressings, non-invasive vascular assessments, and metabolic patient health.

The effectiveness of wound care hinges on maintaining a moist wound environment which allows normal cellular activity without adding bioburden such as slough or eschar tissues. Too much retained fluid causes an unhealthy wound environment and promotes bacterial growth. The moisturizing agent placed in the wound or the flushing fluid produced by the wound must enhance wound healing.

Control of bacterial colonization is of major importance for progressive wound healing. When bacterial growth is unchecked, the signs and symptoms present as foul odor, increased exudate, increased patient wound tenderness, periwound redness or swelling, change of wound bed color, and wound breakdown.

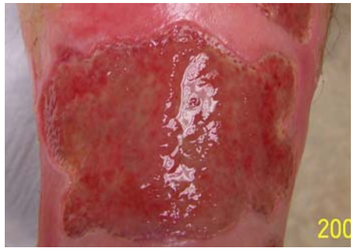
The effects of peripheral vascular disease influences wound healing time. The evaluation of arterial ,venous, and lymphatic systems is essential in determining the potential outcome of wound care procedures. All wound care patients with positive endocrine, cardiac, neurological and circulatory stigmata by medical history must have non invasive vascular testing performed. Abnormal vascular studies should be reviewed with a vascular surgeon and appropriate referral made.

Weekly wound examination is vital to assess the wound bed and periwound areas. This is important as the effects of moisture control dressings and compression wraps can act either positively or negatively. We frequently switch dressing and compression modalities depending upon wound appearance.

In the past open wounds were treated with wet-to-dry saline pads which assisted in debriding wounds. This also dried out immature granulation tissue and promoted eschar and deep tissue scarring. The presence of deep scar or eschar reverts the wound back to the inflammatory processes of auto-debridement instead of the proliferative phase where production of sturdy granulation and collagen tissue lead to epithelialization of the wound.

There are many wound dressing used to control moisture. Calcium alginates, hydrocolloids, and hydrofiber are the most absorbent. These are used on highly weeping wounds whereas hydrogels help maintain moisture within the wound.

Too little moisture. Note the eschar and periwound redness



Too moist. Note the slough and periwound edema

Are you using the correct x-ray views to evaluate the knee?

Knee pain from non traumatic etiologies present to the primary care physician team on a daily basis. Once trauma has been ruled out, mechanical, inherent and overuse causes of knee pain are determined by both physical examination of knee joint integrity and radiographic evaluation.

Knee x-rays views to evaluate degenerative changes include weight bearing PA, flexed knee, lateral, and sunrise views.

X-rays taken with the patient standing up are more helpful as the knee joint functioning under a normal load provides important information of joint integrity.

Patellofemoral arthritis may be evident on the lateral radiograph, although the severity of joint space narrowing and presence of subluxation are usually better visualize on the patellar sunrise views.

MRI and CT evaluation provide visualization for soft tissue, joint effusion and osteochondral defects.

LILLIAN BERRY, PA-C