Glencoe Regional Health Services

Foot Care 101

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Important Notice

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Foot Problems 101:
A guide to the many causes of concern in the foot
Corns and Calluses

- The most common foot lesions treated by podiatrists
- Thickened layer of skin due to pressure and friction
  - Corn – thicker, more focal area, more common on the toes
  - Callus – diffuse thickening of the skin, more common under the ball of the foot

Causes
- Tight footwear
- Toe/bone deformities (bunions, hammertoes)
- Biomechanical/gait abnormalities
Treatment for Corns and Calluses

- Self-treatment is not recommended
  - Corn pads/topical solutions – contain acid that can erode normal skin, producing burns and/or ulcers
  - “Self-cutting” may also be dangerous and result in lacerations/infections
  - Patients are advised to use proper footwear and non-medicated padding

- Podiatric care can include
  - Professional debridement/shaving of thickened tissues
  - Using padding and shoe inserts to off-load pressure
  - Surgical options
Heel Fissures

- Caused by dry skin around the periphery of the heel
  - Worsened if the skin is thick
  - Predisposing factors include
    - Prolonged standing
    - Obesity
    - Open-heeled shoes
    - Diabetes
    - Hypothyroidism
    - Eczema and/or psoriasis
    - Excessive wetness/sweating
    - Dry climate or air
Treatment for Heel Fissures

- Self-management
  - Pumice stone
  - Avoid bathing/showering in hot water
  - Emollients (urea based)
  - Avoid open-heeled shoes

- Podiatric Care
  - Debridement/shaving with scalpel/sanding disk
  - Orthotics
  - Silicone heel cups
  - Prescription strength emollients
Warts

- A viral growth
- Caused by direct contact if skin is compromised (locker rooms, swimming pools, karate classes)
- May be painful upon standing and with side-to-side compression
- Capillary buds may exist within the lesion, resulting in a “salt and pepper” appearance
- If on bottom or “plantar” surface of the foot, it is a “plantar” wart and may develop a callus on top of the wart, making it more difficult to remove
Treatment for Warts

- Self-management should not be attempted
- Many DPM treatment options are available
  - Warts may sometimes resolve on their own
  - Acids and blistering agents
  - Laser treatments
  - Freezing (cryocautery)
  - Surgical excision

- Warts are traditionally difficult to eradicate; persistence is important
Tinea Pedis (Athlete’s Foot)

- A skin disease caused by a fungus
- Shoes create a warm, dark, and humid environment that encourages fungal growth
- Genetic susceptibility plays a large role
- Symptoms:
  - Dry, red, itching, scaling tissues
  - Blisters
  - Odor
  - Secondary bacterial infections may occur
Treatment for Tinea Pedis

- Your podiatrist can recommend:
  - Topical antifungals
  - Oral antifungals
  - Drying agents
  - Changes in footwear and socks

- Prevention:
  - Avoid walking barefoot in common areas
  - Reduce perspiration using foot powders/antiperspirant spray
  - Change shoes frequently and wear light/breathable footwear
  - Wear socks that keep the feet dry and wick away moisture
Chilblains

- Vasospastic disorder in which the small blood vessels in the skin constrict, forming painful red-blue lesions on the skin
- More common in people with poor circulation and in cool/cold, humid climates
- Young girls and older women more susceptible
- Cause is unknown
- May be related to Raynaud’s phenomenon or disease
- Symptoms:
  - Small, sometimes painful, red and blue areas on the skin
  - Often on the toes and fingers but may also affect the nose and ears
  - In rare instances, tissues may break down to form an ulcer
Treatment for Chilblains

- Your DPM may recommend
  - Do not expose feet to direct heat such as fires or heaters
  - Warm feet with socks and footwear
  - Do not rub feet
  - Lotions
  - Antiseptic dressings
  - Topical ointments

- Prevention
  - Avoid cold exposure
  - Stop smoking
  - Reduce caffeine intake
  - Use of socks, leg warmers
Pitted Keratolysis

- Caused by bacterial infection
  - Symptoms:
    - Foul odor
    - Small, discrete “pits” in the plantar tissues of the toes and feet
Treatment for Pitted Keratolysis

- Your podiatrist can work with you to devise a treatment plan
  - Topical antibiotics
  - Systemic antibiotics may be necessary in extreme cases
  - Changing shoes and socks regularly and keeping the feet clean and dry will also assist with reduction of bacterial load
Psoriasis

- Psoriasis is a common skin disease that causes cells to build up rapidly on the surface of the skin, forming thick, silvery scales and itchy, dry, red patches that are sometimes painful.
- May affect toenails, resulting in thickened, pitted, fragile, disfigured nails with inflamed surrounding tissues.
- Cause is unknown.
- No cure.
Treatments are guided by management of symptoms

- Cortisone – oral and topical
- Small exposures to sunlight
- Daily baths to remove scales and calm inflamed skin
- Use of moisturizers or coal tar preparations
- Regular nail trimming by a podiatrist if nails are involved
Eczema/Atopic Dermatitis

- Itchy, scaly eruption of the skin
- Cause is unknown
- Often seen in children but may persist in and throughout adulthood
- May be accompanied by asthma or hay fever
- Classically involves skin on the arms and behind the knees, but may involve tissues anywhere on the body
Treatment for Eczema/Atopic Dermatitis

- Your doctor will work with you to reduce inflammation, relieve itching, and prevent future flare-ups
  - Steroid creams or ointments
  - Oral antihistamines if itching is severe
  - Oral steroids/cortisone
  - Immunomodulators
  - Light therapy (phototherapy)
Pigmented Nevus/Moles

- Clusters of pigmented cells that often appear as small, dark brown spots
- Moles can vary in color and can develop virtually anywhere on your body, even under the toenail
- Most moles are harmless, but in rare cases, moles may become cancerous
- Most moles develop by age 20, although they can continue to appear until middle age
- Some large moles may have risk factors for melanoma
Treatment of Moles

- Treatment of most moles usually is not necessary.
- For cosmetic reasons, a mole may be removed by the podiatrist.
- If a mole exhibits any unusual symptoms, it is important to seek medical attention:
  - Painful
  - Itching or burning
  - Oozing or bleeding
  - Scaly or crusty
  - Changes in size, shape, color, or elevation
- Biopsy can be taken and examined.
Ingrown Toenails

- An ingrown toenail is a painful condition of the toe that usually occurs when a corner of the toenail digs into the skin at the end of or side of the toe.
- Pain and inflammation first occurs at the spot where the nail curls into the skin.
- Causes
  - Inherited
  - Trauma
  - Repetitive pressure
  - Improper trimming
- May involve any toe but most commonly the great toe.
- If left untreated, may progress to infection or abscess.
Treatment of Ingrown Toenails

- **Home care**
  - Soaking the foot in room-temperature water (may add Epsom salt)
  - Application of topical antibiotic
  - Avoid “trimming” the involved nail, as this will often worsen the situation

- **Podiatric care**
  - Professional trimming
  - Oral antibiotics
  - Surgical excision of the involved nail border(s)

- **Prevention**
  - Trim nails properly
  - Trim “straight across”
  - Don’t trim too short
  - Wear appropriate shoes
Blisters

- Fluid-filled lesions that develop under the skin in response to friction
- Common causes
  - Moisture
  - Heat
  - Friction
  - Allergic reactions
  - Burns
Treatment of Blisters

- Prevention is better than cure
  - Properly fitting shoes
  - Appropriate socks
  - Feet and shoes should be kept dry
  - Protective dressings/plasters

- Once a blister has formed
  - If small and intact, simply cover and protect from further friction/pressure
  - If large or painful, the blister should be “lanced”
    - Leave the “roof” of the blister to protect the underlying tissue
    - Dress with antiseptic daily
  - Oral antibiotics may be necessary if infection is suspected
Bunions

- What is a bunion?
- Symptoms
- How they develop
- Treatment options
What Is a Bunion?

- A bunion is an enlargement of the joint at the base of the big toe (the metatarsal-phalangeal [MTP] joint) that forms when the bone or tissue at the big toe joint moves out of place. This forces the toe to bend toward the others, causing a prominent lump of bone that is often painful.
What Is a Bunion?

- The MTP joint itself may become stiff and sore, making even wearing shoes and walking painful.
- A bunion can also occur on the outside of the foot just behind the little toe, where it is called a “bunionette” or a “Tailor’s bunion.”
Symptoms of a Bunion

- Development of a hard or firm bump on the inside edge of the foot by the 1st MTPJ, at the base of the big toe joint
- Redness, swelling, or pain at or near the MTP joint
- Restricted or painful motion of the big toe
How Do You Get a Bunion?

- Bunions form when the normal balance of force that is exerted on the joints and tendons of the foot becomes disrupted. This can lead to instability in the joint and cause the deformity.
How Do You Get a Bunion?

- Bunions are generally progressive in nature, brought about by years of abnormal motion and pressure over the MTP joint.

- Bunions are symptoms of:
  - Faulty foot function
  - The way we walk
  - Inherited foot type
  - Shoe gear aggravation
Other Causes of Bunions

- Foot injuries
- Neuromuscular disorders
- Congenital deformities
- Wearing shoes that are too tight
- In some people, feet that flatten excessively
- Arthritis or inflammatory joint disease
Treatment Options: Conservative

- See your podiatrist at the first indication of pain or discomfort – x-rays may be taken
- Padding, taping and bracing
- Medications
- Physical therapy
- Orthotics
- Changing shoe types
Hammertoes

- What are hammertoes?
- Symptoms
- How they develop
- Treatment options
What are Hammertoes?

- A hammertoe is a contracture or bending of the toe at the first joint of the digit (the proximal interphalangeal joint) that causes the toe to appear like an upside-down V when viewed from the side.
- Any toe can be involved; most commonly the second through the fifth.
- More common in women.
Symptoms of Hammertoes

- Pain upon pressure at the top of the bent toe (usually due to footwear)
- The formation of corns on the top of the joint
- Redness and swelling at the joint contracture
- Restricted or painful motion of the toe joint
- Pain in the ball of the foot at the base of the affected toe
How Do You Get a Hammertoe?

- An abnormal balance of the muscles in the toes
- Heredity and trauma
- Arthritis
- Wearing shoes that are too tight

Treat early to avoid more complicated treatment plans
Treatment Options: Conservative

- Visit your podiatrist for a diagnosis and treatment plan – x-rays may be taken
- Padding, taping, and splinting
- Medication such as anti-inflammatory drugs and cortisone injections
- Orthotics
- Alternative shoe choices
Treatment Options: Surgical

- For less severe hammertoes:
  - Tendon release (if flexible)
  - Bone remodeling

- For more severe hammertoes:
  - Removal of a portion of bone
  - Fusion (joining of bones)
Plantar Fasciitis

- Inflammation and pain along the plantar fascia - the tissue band that supports the arch on the bottom of the foot
- Usually on the bottom of the heel at the point where the plantar fascia attaches to the heel bone
- Becomes chronic in 5-10% of all patients
- Is not necessarily associated with a heel spur
- Over 90% resolve with conservative treatment
Plantar Fasciitis Symptoms

- Pain on standing, especially after periods of inactivity or sleep
- Pain subsides, returns with activity
- Pain related to footwear – can be worse in flat shoes with no support
- Radiating pain to the arch and/or toes
- In later stages, pain may persist/progress throughout the day
- Pain varies in character: dull aching, “bruised” feeling. Burning or tingling, numbness, or sharp pain, may indicate local nerve irritation
Plantar Fasciitis Treatment

- Mechanical – treat the cause
- Anti-inflammatory – treat the pain
- Neither done in isolation
Plantar Fasciitis Treatment

- Stretching, shoe modifications, avoid walking barefoot
- Icing and rest
- Night or resting splint
- Supplemental arch support (OTC vs. custom orthotics)
- Anti-inflammatory medication
- Steroid injections
- Physical therapy
- If conservative measures fail, surgery is an option
Onychomycosis

- Invasion of fungus into the toenails
  - Causes
    - Trauma
    - Chronic disease (e.g., diabetes)
    - Circulatory problems
    - Immunodeficiency
    - Genetic susceptibility
  - Symptoms
    - Thick, discolored nails
    - Foul smell
    - Debris under the toenail
    - Lifting of the toenail
Treatment of Onychomycosis

- Treatments are guided by management of symptoms by your podiatrist
  - Routine debridement
  - Topical medications
  - Oral medications
  - Nail avulsion
  - Laser therapy (long-term studies pending)
Laser Facts

- Fotana Laser
- Neodenumium Yag laser (Nd:Yag)
- FDA approved for clearance of nail fungus
- Raises the temperature of the tissue to achieve a “kill”
- Temperatures must be elevated to a level that is “painful” to achieve “kill”
Treatment Details

- Nail sample will be sent for verification of infection
- Four weekly treatments of all 10 toenails. (Fingernails may be treated as well)
- Cooling gel and cold air are used to reduce pain level during treatments
- Retreatment may be necessary during first year
Important Post Laser Tips

- Reinfection of nail is largely based on presence of fungus on the skin
- Continue prophylactic treatment of skin on feet and toes
- Continue good foot hygiene practice
QUESTIONS?

For More Information, Contact our Office

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