

JOURNAL

2ND QUARTER | 2024

Knowledge That
Moves You
Forward!



IMPORTANT ASPMA DATES

These never change, they are the SAME every year.

Recertification every year
April 1st through May 31st

Membership renewal
October 1st through
December 31st

Journal Questionnaires
Online due December 31st
every year

These are your responsibility to remember and to take care of. These are vital to keeping your membership and certification. Please do not rely on mail or email as items sometimes get lost which are beyond the ASPMA's control. We the ASPMA Board ask you to mark these on your calendar for each year. Maybe set a recurring reminder in your phone.

ASPMA Board of Directors

12

31

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FROM THE PRESIDENT

Happy 2nd Quarter ASPMA Members,

It is truly an honor to be elected to be your 2024-2025 ASPMA President. I have served on the ASPMA Board for the past 7 years in various positions on the Executive Board and am currently the Radiology Chair. The Board, you as a member, and podiatry means the world to me. I am committed and look forward to helping the ASPMA continue to grow, support all the members, and offer new and exciting opportunities.

With that the ASPMA has exciting news...The ASPMA Journal is **GOING DIGITAL!!!** With everything at the palm of our hand it was only right for the journal to be accessible to everyone on the fly. This will be **THE LAST** paper issue! The journal will be emailed on the date of release and accessible on our website under the "Member's Only Section". We recommend that you update your email address to your personal email address, so you DO NOT miss any correspondence. If you need to update your email you can do so on our website under the "Membership" tab.

While on the topic of emails please make sure you read all emails and check our social media, as we send out important information through there. We will be announcing soon new CME opportunities to our membership via email and social media.

If you are a Certified Assistant, the recertification period will end soon. You MUST submit your recertification fee and CMEs by **May 31st**. Please do not miss the deadline. If you do you will lose the certification you worked so hard for.

Upcoming Conferences

August 8th-11th APMA National in Washington, DC

September 27th-28th 10th Annual Complications Course in Naperville, IL

Please check out our [website www.aspma.org](http://www.aspma.org) for more information on the above conferences and how to register. We look forward to seeing you all there.

Thank you again for electing me to be the ASPMA President I will make you all proud. I also couldn't do any of this without the amazing ASPMA Board so thank you for all the work you put in. To the members thank you for everything, we are here to serve you and if you ever need, please do not hesitate to reach out to anyone on the Board.

I would also like to extend the biggest THANK YOU to our sponsors Bako and Brooks for the continued support of the ASPMA.

Tara Brown, PMAC, PRAC, PAAC

President

Radiology Chair



2024-2025 ASPMA OF OFFICERS



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ASPMA Journal subscription is a benefit of ASPMA membership.

SUBMISSIONS

Interested in having an article published in the ASPMA Journal? ASPMA members may submit articles for publication in the ASPMA Journal. Articles should be no more than 500 words and must be submitted in electronic format. The Journal Editor reserves the right to edit or refuse any article submitted for publication.

Please send your articles to Cheryl at DOC@aspma.org.

CHANGE OF ADDRESS

Please notify ASPMA Membership Chair by sending your old address and new address. Notifications should be sent ASAP as not to delay any Journal or letter mailings from ASPMA.

April Foutz, PMAC PRAC
4012 Hoosierwoods Court
Anderson, IN 46013
Email: membership@aspma.org

For advertising opportunities

please email DOC@aspma.org. The appearance of advertising does not constitute an endorsement of the products or services advertised. We reserve the right to refuse advertisers.

NEWS & NOTES

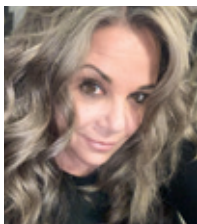
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Alison Sadler, PMAC, PRAC
Tanisha Robertson, PAAC



Download Our New ICD-10-CM Coding Summary!

Brought to you exclusively

by **bako**
intelligence not just information



Download your copy today!

Aspiration (Soft Tissue Mass)

CPT® 20612 Aspiration and/or injection of ganglion cyst(s) any location

ICD-10-CM codes to consider for aspiration biopsy:

- M67.4 Ganglion
- D49.2 Neoplasm of unspecified behavior of bone, soft tissue, and skin
- D21.2- Benign neoplasm of connective and other soft tissue of lower limb, including hip
- D48- Neoplasm of uncertain behavior of other and unspecified sites

Aspiration / Arthrocentesis (Joint or Bursa)

CPT® 20600 Arthrocentesis, aspiration

CPT® 20605 Arthrocentesis, aspiration

ICD-10-CM codes to consider for aspiration:

- M19.07- Primary osteoarthritis
- M19.17- Post-traumatic osteoarthritis
- M19.27- Secondary osteoarthritis
- M65.87- Other synovitis

Bone Biopsy

CPT® 20220 Biopsy, bone

CPT® 20240 Biopsy, bone

ICD-10-CM codes to consider:

- M86- Osteomyelitis
- D49.2- Neoplasm of unspecified behavior of bone, soft tissue, and skin
- D16- Benign neoplasm of bone
- D48.0- Neoplasm of uncertain behavior of bone
- M87- Osteitis

Disclaimer: CPT® codes, trademark of the American Medical Association, are used for identification purposes only. Coverage of services by payers is not guaranteed. Coverage of services by payers should be confirmed with the payer. Coverage of services by payers is not guaranteed. Coverage of services by payers should be confirmed with the payer. Coverage of services by payers is not guaranteed. Coverage of services by payers should be confirmed with the payer.

ICD-10-CM Coding Summary

This resource contains information regarding ICD-10-CM diagnosis codes that commonly support the medical necessity of certain specimen collection techniques that may be performed in-office. These techniques are categorized below by the relevant CPT® codes. The information in this document presents common ICD-10-CM codes to consider; an ICD-10-CM code should be used only if the treating physician determines that it accurately represents the patient's signs and symptoms, and a CPT® code should be used only if the treating physician determines that it accurately represents the pathology managed. Additionally, medical necessity requirements vary by payer, and an ICD-10-CM code may not support use of a certain CPT® code for all payers. Bako Diagnostics does not claim that the information shared here is all-inclusive or recognized by all third-party payers.

A hyphen (-) at the end of an ICD-10-CM Code stem indicates additional characters are required to complete the diagnosis code.

Tangential Biopsy, Punch Biopsy, Incisional Biopsy, Shave Excision

CPT® 11102 Tangential biopsy of skin (e.g. shave, scoop, saucerize, curette, single lesion)

CPT® 11104 Punch biopsy of skin (including simple closure when performed), single lesion

CPT® 11106 Incisional biopsy of skin (e.g. wedge), (including simple closure when performed), single lesion

CPT® 1130X Shaving of epidermal or dermal lesion, single lesion

ICD-10-CM codes to consider for tangential, punch, incisional biopsies and shave excision:

- D49.2 Neoplasm of unspecified behavior of bone, soft tissue, and skin
- D23.7 Other benign neoplasm of skin of lower limb, including hip (need laterality)
- D04.7 Carcinoma in situ of skin of lower limb, including hip (need laterality)
- D22.7 Melanocytic nevi of lower limb, including hip (need laterality)
- D48- Neoplasm of uncertain behavior of other and unspecified sites
- L98.8 Pyogenic disorders of the skin and subcutaneous tissue
- L92- Granulomatous disorders of the skin and subcutaneous tissue

ENFD Punch Biopsy

CPT® 11104 Punch biopsy of skin (including simple closure when performed), single lesion

ICD-10-CM codes to consider when utilizing punch biopsy for epidermal nerve fiber density (ENFD):

- G60- Hereditary and idiopathic neuropathy
- G62- Other and unspecified polyneuropathies
- G63 Polyneuropathy in diseases classified elsewhere
- G64 Other disorders of peripheral nervous system
- E10.4 Type 1 diabetes mellitus with neurological complications
- E11.4 Type 2 diabetes mellitus with neurological complications
- E13.4 Other specified diabetes mellitus with neurological complications

Nail Unit Biopsy

CPT® 11755 Biopsy of nail unit (e.g. plate, bed, matrix, hyponychium, proximal and lateral nail folds)

ICD-10-CM codes to consider for nail unit biopsy:

- D49.2 Neoplasm of unspecified behavior of bone, soft tissue, and skin
- D48- Neoplasm of uncertain behavior of other and unspecified sites
- D23.7 Other benign neoplasm of skin of lower limb, including hip
- D22.7 Melanocytic nevi of lower limb, including hip (need laterality)
- L60.3 Onychodystrophy
- L98.8 Other specified disorders of the skin and subcutaneous tissue

PRACTICE ESSENTIALS™

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November 2023

CTSPICD10CS0002271123



Welcome Our New Members!

Megan Reinert

Lauren Reinert

Gerardina Espinoza

Celina Balderrama

Chelsey Skiles

Laurie Harkins

Delaney Depodesta

Emma Ayers

Lorielle Robidas

Angela Pereira

Tara Wall

Felicia Sanchez

Christina Burke

Heidi Zurcher

Nikki Holloway

Emmylou Horseherder

Sophia Ainsworth

Heidi Gammon

Morgan Stover

Debbie Owens

Nikki Williamson

Demetria Cooper

Kaila Johnson

Amanda Pascale

Chelsie Campbell

Sidney Bauer

Kaitlyn Gombos

Brittany Flanders

Tammi Kay

Jessica Ross Smothers

Heidi Jones

Ashley Williams

Valerie Bookout

Deidre Hopkins

Laura Doherty

Jeanne Jasnocha

Hollie Pellow

Ty Sarra

Maricia Royston

Chassidy Hendricks

Qualifying and Examining Members Receiving Certification

NEW PRACS

February

Patti Donald, PRAC
Kristen Anderson, PRAC
Rebecca Wise, PRAC
Carole Boucher, PRAC
Jarrett Trexler, PRAC
Kerriann Alley, PRAC
Kaitlynn Evans, PRAC

March

Chelsey Skiles, PRAC
Kayla Bailey, PRAC
Kendall Jarman, PRAC
Tracey Johnson, PRAC
Rita Sotelo, PRAC
Yolanda Gutierrez, PRAC
Tara Wall, PRAC
Alexis De La Rosa, PRAC

April

Kaitlin Beatty, PRAC
Ivan Hunter, PRAC
Sophia Ainsworth, PRAC
Tonya Cleaves, PRAC
Christina Burke, PRAC
Lorielle Robidas, PRAC
Caroline Ketterman, PRAC
Kristy Moore, PRAC
Andre Perry, PRAC
Tiki Ward, PRAC
Samantha Warren, PRAC

May

Megan Groff, PRAC
Lauren Schlagel, PRAC
Donna Irvin, PRAC
Brent Robinson, PRAC

NEW PMACS

February 2024

Lashundia Green, PMAC

March 2024

Kayla Bailey, PMAC

April 2024

Malquisua Hernandez, PMAC
Emma Ayers, PMAC
Holly Wyatt, PMAC
Maya Grogan, PAAC
Felicia Barrett, PMAC
Delaney DePodesta, PAAC
Nicolette Weiland, PMAC
Suzette Kelly, PMAC
Kaitlyn Gombos, PMAC
Caroline Yi, PMAC
Collette Davis, PAAC
Ashley Williams, PMAC

May 2024 through 5/6/2024

Maricia Royston, PMAC
Chassidy Hendricks, PMAC





YOUR BODY IS UNIQUE TO YOU—AND THAT INCLUDES YOUR FEET! Your foot type, underlying conditions, and activities combine to create distinctive needs for footwear. The shoes your friend or workout buddy loves may not be right for you. Avoid wasting money on shoes or inserts that don't work for you, and ask your APMA-member podiatrist to guide you to footwear that supports your feet and your lifestyle. Learn *why* before you buy!

CHOOSING A RUNNING SHOE

Podiatrists typically recommend you begin selecting shoes based on your foot type. There are three basic foot types:



FOR FEET WITH LOW ARCHES (FLAT FEET)

Choose a supportive shoe that is designed for stability and motion control. These shoes help to correct for overpronation.



FOR FEET WITH NORMAL ARCHES

Choose a shoe with equal amounts of stability and cushioning to help absorb shock.



FOR FEET WITH HIGH ARCHES

Choose a cushioned running shoe with a softer midsole and more flexibility. This will compensate for the poor shock absorption of a high-arched foot.

From there, select shoes that are appropriate for your activities—don't play basketball in a running shoe, for example. You can learn more about the proper shoes for various activities at www.apma.org/playitsafe. Seek your podiatric physician's advice about shoes and/or inserts to accommodate foot and ankle conditions or injuries you may have.



The **APMA Seal of Acceptance** recognizes footwear found to promote good foot health. To earn the seal, each product is reviewed by a committee of APMA podiatric physicians. Ask your physician which Seal-Accepted shoes, socks, and insoles are the best options for *your* feet!

Know why before you buy. For more information, visit www.apma.org/why.

MEMBERSHIP REINSTATEMENT FORM

ONLY USE THIS FORM IF YOU HAVE NOT RENEWED YOUR MEMBERSHIP IN THE PAST TWO (2) YEARS.

Section 4.1 Dues

H. Any member who is dropped from membership, wishing re-instatement shall have to go through the Executive Committee for approval of reinstatement. They will need to submit a letter stating why they did not renew for the time frame, that they were dropped. Which cannot be more than two (2) years. Upon approval by the Executive Committee, the former member will need to pay all past dues and assessments including late payment fees, this will all need to be faxed to the Executive Director. A former member whose membership has lapsed for more than **two (2) years** shall make application as a new member.

Name: _____

DPM Name: _____

Practice Name: _____

Practice Address: _____

City: _____ State: _____ Zip Code: _____

Home Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____ Email: _____

Please include a letter on your practice letterhead stating the reason your membership lapsed.

Fees Due: (please check one)

1 Year Lapse: \$170 _____

2 Year Lapse: \$340 _____

*Amount will be confirmed by the
Executive Committee before being processed.*

Please submit form, letter and check/money order payable to the ASPMA to:

Karen Keathley, PMAC, PRAC
Executive Director
109 First Street
Itasca, IL 60143-2114
Phone: 1-888-88ASPMA

Or

Fax with credit card information and signature to 847-773-9976

PERSPECTIVES

The Vital Role of **SMILE.** The New Patient.

By Theresa Kemble, PMAC

Did you know that it only takes twenty-six facial muscles to form a smile? And did you further know it takes forty-three facial muscles to form a frown. Why am I telling you this? It's simple really, if you work as a podiatric medical assistant and it's either at the front-end or back-end of the podiatry office, you are the first representative a potential new patient who sees and hears everything you do. You represent your employee, the podiatrist.

A simple smile and a pleasant greeting can calm nerves of a first time patient whether it's an ingrown nail, Achilles tendinitis, nail fungus, foot injury, or a diabetic foot check. Also compassion with that genuine smile goes along way to put the new patient at ease. Use not only that smile but use your ears and eyes as well. Did the new patient fill out the welcome form right? If you have time, (Yes, I know that we can do a million and one things in a matter of minutes.) offer to help them, it could they have trouble seeing. If you lead them to the treatment room, offer to take their shoes off especially if the new patient is elderly and doesn't have an aide with or a family member with them. That friendly gesture could mean the world to them.

If you're talking down their history, take notice of everything the new patient says. Repeat what they say back because chances are the patient may had forgotten a certain detail about their injury they told you and forgot to the doctor. Or when they are setting up their next appointment they forgot a new medication they are on. This is very important. There are certain anti-fungal drugs that may cause an interaction or cause the medication to be less effective. Quickly place an amended note to their chart and notify the podiatrist of the change.

Your sight is very important in helping your new patient too. Do you notice anything peculiar in their manner, like do

they look disheveled? Is there edema present in both feet, when you took off those shoes for them? Is there a reddish wound with an odor? Does that mole on the bottom of their sole look odd, dark in color, have uneven edges? Report everything you see to the podiatrist.

Finally, not only is your podiatrist establishing a new patient relationship with the new patient, you are too! Life happens and there are days when you're not at your best. The new patient doesn't know that your teenager forgot yet again to take the trash out. Or a co-worker called out sick and a prior authorization for A MRI is needed in hour because an established patient just called about it. That simple smile can help you too. The new patient always comes first. If you see the new patient being a little anxious mention how the weather is. Or if they're a sport fan mention talk about their favorite team. Ask about their favorite food or TV show.

That personable care can go along with helping your new patient feel right at home! For the new patient, always give them service with a smile!



the National

APMA ANNUAL SCIENTIFIC MEETING

WASHINGTON, DC | AUGUST 8-11, 2024

apma





Article written by: Alison Sadler PMAC, PRAC
Resources used to write this article
came from 25 years of personal podiatry
experience and Mayo Clinic

MOST COMMON CONCERNS REQUIRING A PODIATRIC VISIT

Bunion (also called Hallux Valgus):

Definition: A bunion is a bony prominence that forms on the joint at the base of the big toe. A bunion forms when some of the bones in the front part of the foot move out of place. This causes the big toe to get pulled toward the smaller toes. It also forces the joint at the base of the big toe to stick out.

Etiology: Heredity, Congenital or Acquired Symptoms: Pain, stiffness or swelling in the joint. The bony protrusion may become red or tender with pressure. Some bunion deformities are asymptomatic.

Treatments: Changes to shoe gear, use of bunion pads or cushions, custom made orthotics, cortisone injections or NSAIDs if the deformity is painful. If conservative treatments fail, surgical correction may be needed.

Corns and Calluses:

Definition: A corn or a callus is a thickening over growth of the epidermis that causes pressure. A hard corn (heloma durum) is usually on the top of the toes and a soft corn (heloma molle) is usually thickened skin between the toes that may have a whitish appearance. A callus differs from a corn only in that it is larger in size and more irregularly shaped and most commonly found on the plantar aspect of the foot. When a corn is found within the callus the lesion is called an intractable plantar keratosis (IPK).

Etiology: The usual cause of a callus or corn is friction and pressure upon the epidermis related to some biomechanical problem, or poorly-fitting shoes.

Symptoms: Raised bumps surrounded by inflamed, hardened or thick skin. They can be painful with direct pressure. Diabetic patients with neuropathy may not feel a corn or callus which may result in an open wound.

Treatments: A DPM can shave or pare down the thickened skin, recommend well fitted shoes and using protective pads, custom made accommodative orthotics or surgery to correct the underlying cause of the corn or callus such as an exostosis, hammertoe deformity, or any other biomechanical condition.

Plantar Wart (Verruca):

Definition: Plantar warts are small, rough growths on the bottom of a patient's foot, usually at the base of the toes or on the ball or heel. Black pinpoint spots are commonly seen in warts. Patient may have one or a cluster of warts.

Etiology: Plantar warts are caused by the human papillomavirus (HPV).

Symptoms: May be asymptomatic or very painful (usual with lateral compression pressure).

Treatments: Debridement, Topical application of salicylic acid, freezing the lesion with liquid nitrogen, surgical removal or the latest most effective treatment is the SWIFT treatment.

Heel Pain (also called Plantar Fasciitis) :

Definition: Plantar fasciitis is an inflammation of a thick band of tissue called the plantar fascia. This tissue runs across the bottom of the foot and connects the heel bone and toes. This is one of the most common causes of heel pain.

Etiology: May be secondary to biomechanical abnormality

Symptoms: Patients typically complain of a stabbing pain in the bottom of the foot in the arch or heel region. Pain is usually the worst in the morning or upon rising after sitting for a period of time. **Treatments:** Include icing, stretching, not wearing unsupportive shoes or walking barefoot, changing your shoe gear to a supportive shoe with OTC inserts can help. However, in more serious chronic conditions patients may need specific types of supports to wear such as: custom orthotics, an air heel brace, PF sling which are worn during the day or a night splint while sedentary and at bedtime. In some cases the DPM may recommend EPAT treatments, physical therapy or surgery EPF (endoscopic plantar fasciotomy) as a last resort.

Morton's Neuroma:

Definition: A Morton's neuroma is a benign nerve tumor that is painful and affects the ball of your foot, most commonly the area between your third and fourth toes.

Etiology: An entrapment and/or trauma of a digital nerve resulting in swelling and enlargement.

Symptoms: Numbness and burning pain between the toes (inner spaces), pain may radiate into toes

Treatment: Cortisone Injections. Foot Tapings. Orthotics. Neurolytic Injections, and nerve decompression surgery or neurectomy (removal of the nerve).

Fracture of the Bones of the Foot and Ankle:

Definition: A bone fracture is a complete or partial break in a bone.

Etiology: Includes trauma, overuse and diseases that weaken bones.

Symptoms: Tenderness, swelling, bruising, pain with direct pressure and possible abnormal motion. **Treatments:** Often involve applications of a soft cast (Unna boot) or compression wraps to reduce swelling followed by immobilization in a walking boot to allow the bone time to heal. Sometimes, surgery may be needed to reset the bone using internal fixation to stabilize the broken bone.



NEW MEMBER SCHOLARSHIP!!

Do you know a co-worker or employee that YOU think would benefit as a member of the ASPMA and should take the next step to further their career in Podiatry?

Well, the ASPMA is offering the opportunity to two (2) assistants to **WIN** a ASPMA membership.

Qualifications:

- Must not be a **current** or **inactive** ASPMA Member
- Must work for a DPM

To Enter:

- Current ASPMA member, Office/Practice Manager, or DPM can nominate a staff member for the scholarship
- Non-Member can nominate themselves
- Submitted a 100-word statement on "Why you or nominated staff member would benefit as a member of the ASPMA and what do you love about Podiatry" to aspmascholarship@gmail.com by **July 25, 2024**.

Winner will be notified by **August 20th, 2024 and honored in our 2nd Quarter Journal.**

IMPORTANT

ANNOUNCEMENT

THIS IS THE LAST PRINTED
VERSION OF THE ASPMA
JOURNAL.

YOU WILL STILL BE ABLE TO
ACCESS THE JOURNAL IN THE
MEMBERS-ONLY SECTIONS OF
THE ASPMA WEBSITE.

WWW.ASPMA.ORG



Important UPDATED Email addresses

**PLEASE ADD TO EMAIL CONTACTS SO
YOU DON'T MISS IMPORTANT
INFORMATION**

- Newsletter@ASPMA.org
- Membership@ASPMA.org
- Recertification@ASPMA.org

**Additional contacts for the ASPMA
on the ASPMA website.**

ASPMA RADIOLOGY EXAM REGISTRATION FORM/ STUDY GUIDE

PLEASE PRINT

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Phone No.: _____ Fax No.: _____ Email: _____

Cell Phone: _____ Requested Exam Site: _____ Online _____

Exam Registration Fee - \$400.00 (If received at least 30 days prior to exam date)

Exam Registration Fee - \$450.00 (If received within 30 days of exam date)

Exams are NON-REFUNDABLE & NONTRANSFERABLE. So please purchase correct exam.

☐ No study guide needed. (still the same price)

Mail with a check made payable to ASPMA Qualifying and Examining to:

ASPMA
109 1st Street
Itasca, IL 60143-2114
Phone: 888-882-7762

A \$25.00 fee will be charged for all returned checks.

OR

Fax with credit card information and signature to 847-773-9976.

PLEASE PRINT LEGIBLY

Circle One: VISA Mastercard Discover American Express

Name as it appears on card: _____

Card Number: _____ Expiration Date: _____ / _____ CVV Code _____

(3 digit number on back of card)

Billing Address **(if different than above)**: _____

Email (For Receipt): _____

Signature: _____

**** Upon receipt of your Exam Registration Form, fee, and proof of membership you will be sent a confirmation of registration. Please present this confirmation to the Exam Proctor on the day of the exam.**

PERSPECTIVES

SOLEFUL SERVICE: The Rewarding Profession of Being a *Certified Podiatric Medical Assistant*



In the dynamic world of healthcare, few professions offer the unique blend of clinical expertise, administrative finesse, and patient interaction that defines the role of a Podiatric Medical Assistant. From assisting in minor surgeries to fostering patient education, you play a pivotal role in the realm of foot care. These are just a few rewarding aspects of being a Podiatric Medical Assistant and the positive impact you make on the lives of both patients and physicians.

- 1. Patient-Centric Care:** Podiatric Medical Assistants are at the forefront of patient care, providing compassionate and attentive assistance. You create a welcoming environment for patients, helping them feel at ease during examinations and procedures. The rewarding nature of this profession lies in the direct impact on patients' well-being.
- 2. Diverse Responsibilities:** The role of a Podiatric Medical Assistant is diverse, encompassing both clinical and administrative tasks. From assisting in surgeries and wound care to managing appointment schedules and handling patient documentation, every day brings new challenges and opportunities for growth.
- 3. Building Strong Patient Relationships:** Podiatric Medical Assistants often form strong bonds with patients, becoming a source of support and guidance. Your ability to communicate effectively, empathize with patients' concerns, and educate them on proper foot care contributes to positive patient experiences.

By Michele Bradice, PMAC, PRAC, PAAC
Scientific Program Chair & Immediate Past President, ASPMA

- 4. Contribution to Diagnostic Procedures:** Podiatric Medical Assistants have the opportunity to assist in diagnostic procedures, including X-rays and imaging. This involvement enhances your skill set and provides a deeper understanding of the field, making your contribution integral to the diagnostic process.
- 5. Continuous Learning and Professional Development:** The field of podiatry is ever evolving, with new technologies and treatment modalities emerging. Podiatric Medical Assistants engage in continuous learning, attending conferences, workshops, and training sessions to stay abreast of the latest advancements. This commitment to professional development adds a sense of fulfillment to your job.
- 6. Team Collaboration:** Podiatric Medical Assistants work closely with podiatrists, nurses, and other healthcare professionals. The collaborative nature of the job fosters a sense of teamwork, with each member contributing their expertise to provide comprehensive care to patients.
- 7. Job Stability and Growth Opportunities:** The demand for healthcare professionals, including Podiatric Medical Assistants, continues to grow. Job stability and opportunities for advancement are attractive features of this profession. As the field expands, so do the avenues for career growth.

- 8. Making a Difference:** Perhaps the most rewarding aspect is the opportunity to make a tangible difference in the lives of patients. From alleviating pain to improving mobility, Podiatric Medical Assistants actively contribute to enhancing the quality of life for those seeking foot care.

Being a Podiatric Medical Assistant is not just a job; it's a rewarding profession that combines technical skills with a passion for patient well-being. The daily challenges, diverse responsibilities, and positive impact on patients' lives make this profession both fulfilling and indispensable in the world of healthcare. For those drawn to a career that blends compassion with expertise, being a Podiatric Medical Assistant is a journey of professional satisfaction and personal growth.

The ASPMA offers certification in Podiatric Medical Assisting (PMAC), Administrative Assisting (PAAC) and Radiology (PRAC).

Visit our website at ASPMA.org and click on the "certification" tab to take your career to the next level.

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Keep Your Feet Safe from Lawnmower Accidents

Avoid turning your lawn into a “toe-away” zone and use extra caution when operating a power lawnmower or other power gardening tools. Don’t underestimate the power of a lawnmower—the blades whirl at 3,000 revolutions per minute and produce three times the kinetic energy of a .357 handgun. Follow these precautions:



Wear heavy shoes or work boots when mowing. No sneakers or sandals.

Don’t mow a wet lawn—losing control from slipping on rain-soaked grass is the leading cause of foot injuries caused by power mowers.



Use a mower with a release mechanism on the handle that automatically shuts off when the hands let go.

Keep the clip bag attached when mowing to prevent projectile injuries.



Always keep children away from the lawn when mowing.

If a mower accident occurs—even just a minor injury—immediate treatment is necessary to flush the wound thoroughly and prevent infection. Superficial wounds can be treated on an outpatient basis, but more serious injuries usually require surgical intervention to repair any tendon damage, deep clean the wound and suture it.

For more foot and ankle health information, visit FootHealthFacts.org, the patient education website of the American College of Foot and Ankle Surgeons.



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Morton's Neuroma

By: Morgan Fenstermaker, PMAC PRAG

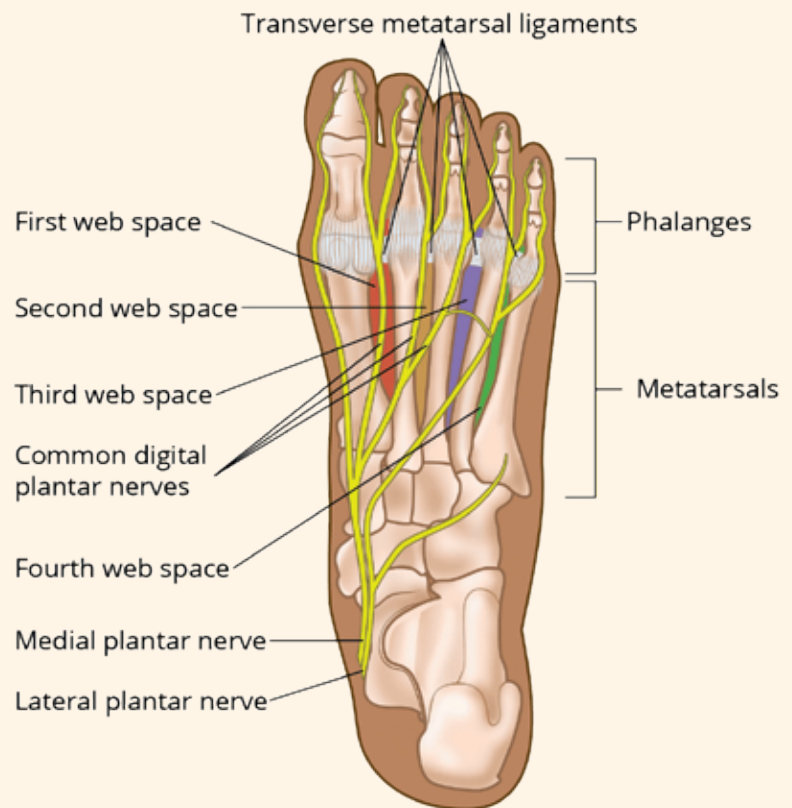
Morton's neuroma is a painful condition affecting the nerves in the ball of the foot, most commonly between the third and fourth toes. This condition is characterized by a thickening of the tissue surrounding a nerve, leading to compression and irritation. Morton's neuroma is often associated with stress or trauma to the foot, such as wearing tight or ill-fitting shoes, high heels, or participating in activities that involve repetitive impact on the forefoot. Additionally, foot deformities like bunions, hammertoes, or high arches can contribute to the development of Morton's neuroma by placing increased pressure on the nerves. Certain factors like foot structure, gait abnormalities, and genetic predisposition may also play a role. Individuals with Morton's neuroma typically experience symptoms such as sharp or burning pain in the ball of the foot, tingling or numbness, and a sensation of having a pebble in the shoe. It is beneficial to recognize the early symptoms of Morton's neuroma which may help to increase the possibility of prompt relief. Morton's neuroma is a very uncomfortable condition to live with.

Morton's Neuroma

Morton's neuroma is a painful foot condition that commonly affects the areas between the second and third or third and fourth toe, although other areas of the foot are also susceptible. Morton's neuroma is caused by an inflamed nerve in the foot that is being squeezed and aggravated by surrounding bones.

What Increases the Chances of Having Morton's Neuroma?

- Ill-fitting high heels or shoes that add pressure to the toe or foot
- Jogging, running or any sport that involves constant impact to the foot
- Flat feet, bunions, and any other foot deformities



Treatment Options:

Some of the treatment options that can be offered to help reduce or relieve the neuroma pain.

- Wider shoes in the toe box
- Orthotics with a possible metatarsal pad
- An oral anti inflammatory
- A cortisone Injection
- Alcohol Injection
- Surgical Excision of the neuroma.

Morton's neuroma is a very treatable condition. If you have pain in this part of your foot, it is suggested that you visit a podiatrist who can provide you with expert medical advice.

2024 PODIATRY CONFERENCES *schedule*

The National APMA Annual Scientific Meeting 2024

Washington DC Convention Center
Washington, DC
August 8-11, 2024
www.APMA.org

Great Lakes Conference

August 16-17, 2024 – MPMA Summer Conference
February 5-9, 2025, Great Lakes Conference

Midwest Podiatry Conference

Chicago Illinois
Hyatt Regency Chicago
March 6-9, 2025
www.midwestpodconf.org

Region III

Information coming soon.



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FOOT & ANKLE INJURIES IN YOUNG ATHLETES

WHAT PARENTS NEED TO KNOW

10%

of all injuries seen in the ER are ankle sprains

83%

of ankle injuries are diagnosed as ligament sprains with incomplete tears

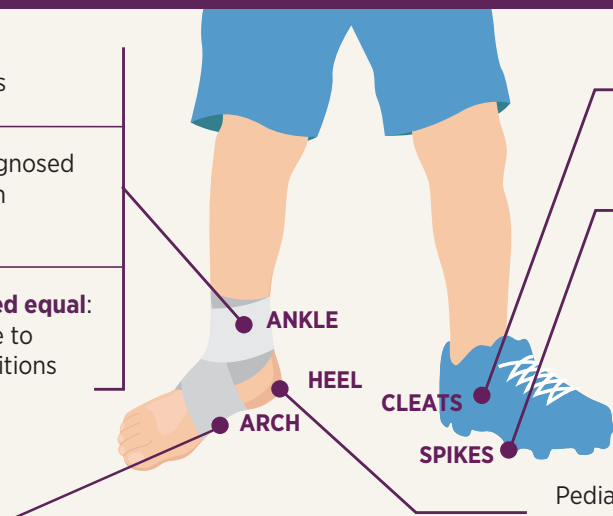
90%

Not all fields are created equal: of ankle sprains are due to poor playing field conditions

Flat feet or a rigid arch and the use of improper or worn-out footwear may **increase the risk of developing shin splints**

In football, the foot and ankle account for **16%** of all injuries

Overuse injuries include **Achilles tendonitis and stress fractures**



Rubber cleats are not necessary for **children under 10** – use an all-purpose sports shoe

Metal spikes should not be used until **teenage years**

The ankle is the **second most common site of injury in baseball players** after the shoulder

Pediatric heel pain is very different from adult heel pain; **it does not get better with walking around**

Generally, injuries seen in younger athletes fall in three categories:

1

Injuries related to growth

2

Overuse injuries

3

Acute presentations

When is a sprain really bad?

Sprains are classified in three categories:

FIRST DEGREE	SECOND DEGREE	THIRD DEGREE
Tissue is only stretched - Slight swelling - Mild loss of range of motion and strength - No decrease in stability	Involves stretching and some tearing of tissue - Moderate swelling - Usually includes some bruising - Moderate loss of range of motion and strength - Some decrease in stability	Complete tearing of tissue - Significant swelling and bruising - Near complete loss of range of motion and strength - Marked decrease in stability

The heel is where it's at

Sever's disease is a common cause of heel pain in growing kids, physically active kids.



The most important thing to know about Sever's disease is that, with proper care, the condition usually goes away in under two months. Early diagnosis, proper care, and taking measures to protect the heel can help protect against future problems.

For more health information and tips, visit FootHealthFacts.org—the patient education website of the American College of Foot and Ankle Surgeons.



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RECERTIFICATION

NECROTIZING FASCIITIS

By Keshia Davis, PMAC, PRAC, PAAC



Necrotizing Fasciitis (NF), commonly known as flesh-eating disease, is a rare but life-threatening bacterial infection that affects the soft tissue and fascia. It is most noted in the toes, feet, and fingers. Despite its rarity, NF is notorious for its rapid progression and high mortality rate. This essay aims to explore the etiology, clinical manifestations, diagnosis, treatment, and prevention strategies of Necrotizing Fasciitis. There are two types of necrotizing Fasciitis:

Etiology:

NF is primarily caused by bacterial pathogens, most commonly group A *Streptococcus* (GAS) and *Staphylococcus monomicrobial* (bacteria enter the body through breaks in the skin, such as cuts, wounds, or surgical incisions. Once inside, they release toxins and enzymes that destroy tissue, leading to necrosis and systemic toxicity.

Clinical Manifestations:

The hallmark of NF is severe pain, often disproportionate to the apparent wound. Other symptoms may include swelling, redness, warmth, and rapidly spreading erythema. As the infection progresses, patients may develop fever, chills, nausea, vomiting, confusion, and shock. In some cases, bullae, crepitus (gas in the tissue), and skin discoloration resembling a purplish rash may be present.

Diagnosis:

Early diagnosis is critical for the successful management of NF. Physicians rely on a combination of clinical examination, imaging studies (such as CT scans and MRI), and laboratory tests (including blood cultures and tissue biopsies) to confirm the diagnosis. Imaging helps identify the extent of tissue involvement, while blood cultures aid in identifying the causative bacteria.

Treatment:

The cornerstone of NF treatment is aggressive surgical debridement, aimed at removing necrotic tissue and controlling the spread of infection. This may necessitate multiple surgeries and, in severe cases, limb amputation to save the patient's life. Alongside surgery, broad-spectrum antibiotics are administered intravenously to target the infecting bacteria. Supportive care, including fluid resuscitation, pain management, and hemodynamic support, is crucial to stabilize patients and mitigate complications.

Prevention:

Preventing NF revolves around proper wound care and infection control measures. Prompt treatment of minor wounds, thorough cleansing, and appropriate dressing are essential to prevent bacterial entry. Individuals with compromised immune systems or chronic medical conditions should be particularly vigilant. Moreover, healthcare facilities must adhere to strict hygiene protocols to minimize the risk of nosocomial transmission.

Conclusion:

Necrotizing Fasciitis poses a formidable challenge to clinicians due to its aggressive nature and high mortality rate. Early recognition, prompt intervention, and multidisciplinary management are paramount for improving outcomes in affected individuals. Further research into novel treatment modalities and preventive strategies is warranted to mitigate the morbidity and mortality associated with this devastating condition.

Questionnaires must be taken online if you wish to use them as credit towards your recertification in 2024.

QUESTIONNAIRE FOR THE — NECROTIZING FASCIITIS

Multiple choice- choose the best answer(s)

- 1. What is the primary cause of Necrotizing Fasciitis?**
a) Viral infection c) Fungal infection
b) Bacterial infection d) Parasitic infection
- 2. Which bacteria is the most common causative agent of Necrotizing Fasciitis?**
a) Escherichia coli
b) Streptococcus pneumoniae
c) Group A Streptococcus
d) Clostridium difficile
- 3. What is the hallmark symptom of Necrotizing Fasciitis?**
a) Itching c) Severe pain
b) Numbness d) Tingling sensation
- 4. Which of the following imaging studies is commonly used for diagnosing Necrotizing Fasciitis?**
a) X-ray c) CT scan
b) Ultrasound d) PET scan
- 5. What is the mainstay of treatment for Necrotizing Fasciitis?**
a) Antiviral medication c) Chemotherapy
b) Antibiotics d) Surgical debridement
- 6. Which of the following complications is associated with Necrotizing Fasciitis?**
a) Hypertension c) Septic shock
b) Diabetes mellitus d) Osteoporosis
- 7. What is the mortality rate of Necrotizing Fasciitis if left untreated?**
a) Less than 5% c) 30-50%
b) 10-20% d) More than 70%
- 8. Which of the following is NOT a common site for Necrotizing Fasciitis infection?**
a) Arms c) Abdomen
b) Legs d) Brain
- 9. What term describes the gas accumulation in the tissue seen in some cases of Necrotizing Fasciitis?**
a) Crepitus c) Emphysema
b) Hyperinflation d) Pneumothorax
- 10. Which of the following is a preventative measure for Necrotizing Fasciitis?**
a) Avoiding hand washing
b) Proper wound care
c) Ignoring minor wounds
d) Using contaminated medical instruments
- 11. What is the main reason for limb amputation in severe cases of Necrotizing Fasciitis?**
a) Cosmetic purposes
b) To prevent further infection spread
c) To reduce pain
d) Patient preference
- 12. Which of the following is NOT a symptom of Necrotizing Fasciitis?**
a) Swelling c) Cool skin
b) Redness d) Fever
- 13. What is the primary goal of surgical debridement in Necrotizing Fasciitis?**
a) To remove healthy tissue
b) To remove necrotic tissue
c) To introduce bacteria
d) To speed up healing

14. Which of the following is a common route of entry for bacteria causing Necrotizing Fasciitis?
 - a) Inhalation
 - b) Ingestion
 - c) Injection
 - d) Skin break
15. What term describes the rapid progression of Necrotizing Fasciitis?
 - a) Gradual
 - b) Steady
 - c) Insidious
 - d) Fulminant
16. Which of the following is NOT a risk factor for developing Necrotizing Fasciitis?
 - a) Diabetes mellitus
 - b) Obesity
 - c) Young age
 - d) Immunosuppression
17. Which of the following statements regarding Necrotizing Fasciitis is false?
 - a) It is commonly caused by viruses
 - b) It is characterized by rapid tissue destruction
 - c) It requires prompt medical intervention
 - d) It primarily affects the soft tissue and fascia
18. What is the most appropriate initial diagnostic test for suspected Necrotizing Fasciitis?
 - a) Blood culture
 - b) MRI
 - c) Ultrasound
 - d) Clinical examination
19. What percentage of patients with Necrotizing Fasciitis require limb amputation?
 - a) Less than 5%
 - b) 10-20%
 - c) 30-50%
 - d) More than 70%
20. Which of the following statements regarding Necrotizing Fasciitis is true?
 - a) It primarily affects bones
 - b) It is self-limiting
 - c) It can lead to septic shock
 - d) It has a low mortality rate
21. What is the preferred route of antibiotic administration for treating Necrotizing Fasciitis?
 - a) Oral
 - b) Intramuscular
 - c) Intravenous
 - d) Topical
22. What is the typical time frame for the development of symptoms in Necrotizing Fasciitis?
 - a) Days to weeks
 - b) Weeks to months
 - c) Hours to days
 - d) Months to years
23. Which of the following factors contributes to the rapid spread of Necrotizing Fasciitis?
 - a) Low humidity
 - b) High pH
 - c) Bacterial toxins
 - d) Cold temperatures
24. What is the primary mechanism by which Necrotizing Fasciitis causes tissue destruction?
 - a) Apoptosis
 - b) Ischemia
 - c) Necrosis
 - d) Fibrosis
25. Which of the following is NOT a common complication of Necrotizing Fasciitis?
 - a. Sore throat
 - b. Redness
 - c. Swelling
 - d. Warmth

CME Credit Breakdown

25-23 correct	= 1.5 CME credits
22-19 correct	= 1.25 CME credits
18-14 correct	= 1.00 CME credits
13-10 correct	= .75 CME credits
9-5 correct	= .50 CME credits
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THE ROLE OF ARTIFICIAL INTELLIGENCE IN RADIOLOGY

Introduction

Artificial Intelligence (AI) has rapidly emerged as a transformative force across various domains, and its application in radiology holds immense promise. Radiology, as a field, deals with the interpretation of medical images to diagnose and treat diseases. The integration of AI technologies in radiology has led to significant advancements in image analysis, diagnosis accuracy, and workflow efficiency.

AI Applications in Radiology

1. **Image Interpretation:** AI algorithms, particularly deep learning models, excel in image interpretation tasks. These algorithms can analyze medical images such as X-rays, CT scans, and MRIs with high accuracy, often outperforming human radiologists in certain tasks.
2. **Diagnostic Assistance:** AI systems can serve as powerful diagnostic aids for radiologists. By analyzing images and identifying patterns, AI algorithms can assist radiologists in detecting abnormalities, lesions, and early signs of diseases.
3. **Workflow Optimization:** AI technologies streamline radiology workflows by automating repetitive tasks. This includes image preprocessing, segmentation, and annotation, allowing radiologists to focus more on complex cases and patient care.
4. **Quantitative Analysis:** AI facilitates quantitative analysis of medical images by extracting precise measurements and quantitative features. This enables objective assessment of disease progression and treatment response.
5. **Predictive Analytics:** AI algorithms can analyze vast amounts of patient data to predict disease

outcomes, assess risk factors, and personalize treatment plans. This predictive analytics capability enhances clinical decision-making in radiology.

Benefits of AI in Radiology

1. **Improved Accuracy:** AI algorithms reduce the risk of human error in image interpretation, leading to more accurate diagnoses and treatment plans.
2. **Efficiency Gains:** Automation of routine tasks and workflow optimization through AI technologies increase radiology department efficiency, reducing turnaround times and enhancing patient care.
3. **Enhanced Quality of Care:** AI assists radiologists in making more informed decisions, resulting in better patient outcomes and improved quality of care.
4. **Cost Savings:** By streamlining workflows and improving diagnostic accuracy, AI adoption in radiology can lead to cost savings for healthcare institutions and patients.
5. **Research and Innovation:** AI-driven research in radiology fuels innovation, leading to the development of advanced imaging techniques, diagnostic tools, and treatment modalities.

Challenges and Considerations

1. **Regulatory Compliance:** Ensuring compliance with regulatory standards



and guidelines is crucial when implementing AI technologies in radiology to safeguard patient safety and data privacy.

2. **Interpretability and Transparency:** The black-box nature of some AI algorithms poses challenges regarding the interpretability and transparency of decision-making processes, raising concerns about trust and accountability.
 3. **Data Quality and Bias:** AI models heavily rely on high-quality, diverse datasets for training. Ensuring data quality and mitigating biases in training data are essential to prevent algorithmic biases and ensure equitable healthcare outcomes.
 4. **Integration with Clinical Workflow:** Seamless integration of AI tools into existing clinical workflows is vital to maximize their utility and acceptance among radiologists and healthcare providers.
 5. **Ethical and Legal Implications:** Ethical considerations regarding patient consent, data usage, and liability must be addressed to navigate the ethical and legal implications associated with AI deployment in radiology.
3. **Clinical Decision Support Systems:** AI-driven clinical decision support systems will become increasingly sophisticated, providing real-time guidance to radiologists during image interpretation and patient management.
 4. **Personalized Medicine:** AI-enabled predictive analytics will facilitate personalized medicine approaches in radiology, allowing for tailored treatment plans based on individual patient characteristics and disease profiles.
 5. **Collaborative Research Initiatives:** Collaboration between academia, industry, and healthcare institutions will drive collaborative research initiatives focused on AI in radiology, fostering innovation and knowledge exchange.

Future Directions

1. **Continued Advancements in AI:** Ongoing research and development efforts will lead to the refinement of existing AI algorithms and the creation of novel techniques tailored specifically for radiology applications.
2. **Multimodal Imaging Integration:** Integration of AI across different imaging modalities, such as

combining MRI, CT, and PET scans, will enable comprehensive and multimodal image analysis for enhanced diagnostic accuracy.

Conclusion

The integration of AI technologies in radiology represents a paradigm shift in medical imaging, offering unprecedented opportunities to enhance diagnostic accuracy, improve patient care, and drive innovation. While challenges such as regulatory compliance, data quality, and ethical considerations persist, the future of AI in radiology looks promising, with continued advancements poised to revolutionize healthcare delivery and outcomes.

THE ROLE OF AI IN RADIOLOGY QUESTIONNAIRE

Multiple Choice- choose the best answer(s)

1. **What is the primary goal of integrating AI in radiology?**
 - A) Reducing patient waiting times
 - B) Enhancing diagnostic accuracy and efficiency
 - C) Decreasing healthcare costs
 - D) Expediting administrative tasks
2. **Which AI application in radiology involves the analysis of medical images to detect abnormalities?**
 - A) Workflow optimization
 - B) Predictive analytics
 - C) Image interpretation
 - D) Quantitative analysis
3. **What is one potential benefit of AI in radiology?**
 - A) Decreased patient outcomes
 - B) Reduced diagnostic accuracy
 - C) Enhanced quality of care
 - D) Increased medical errors
4. **Which challenge is associated with the interpretability of AI algorithms in radiology?**
 - A) Data quality and bias
 - B) Regulatory compliance
 - C) Integration with clinical workflow
 - D) Transparency of decision-making processes
5. **What is a future direction for AI in radiology?**
 - A) Increased reliance on manual image interpretation
 - B) Decreased collaboration between academia and industry
 - C) Integration of multimodal imaging for comprehensive analysis
 - D) Reduced emphasis on personalized medicine
6. **Which of the following is NOT an AI application in radiology?**
 - A) Workflow optimization
 - B) Predictive analytics
 - C) Manual image interpretation
 - D) Quantitative analysis
7. **How do AI algorithms contribute to workflow optimization in radiology?**
 - A) By increasing administrative tasks for radiologists
 - B) By automating routine tasks
 - C) By decreasing diagnostic accuracy
 - D) By reducing patient waiting times
8. **Which term describes the process of extracting precise measurements from medical images using AI?**
 - A) Image segmentation
 - B) Workflow optimization
 - C) Quantitative analysis
 - D) Predictive analytics
9. **What role do collaborative research initiatives play in the future of AI in radiology?**
 - A) They hinder innovation and knowledge exchange.
 - B) They drive innovation and knowledge exchange.
 - C) They increase reliance on manual image interpretation.
 - D) They reduce emphasis on personalized medicine.
10. **What ethical consideration must be addressed when deploying AI in radiology?**
 - A) Patient waiting times
 - B) Data quality and bias
 - C) Integration with clinical workflow
 - D) Transparency of decision-making processes
11. **In what way does AI contribute to personalized medicine in radiology?**
 - A) By increasing reliance on standardized treatment plans
 - B) By tailoring treatment plans based on individual patient characteristics
 - C) By decreasing diagnostic accuracy
 - D) By reducing patient outcomes

- 12. What is a potential challenge associated with AI algorithms in radiology?**
A) Increased interpretability
B) Decreased workflow efficiency
C) Improved regulatory compliance
D) Algorithmic biases
- 13. Which regulatory aspect is essential to consider when implementing AI in radiology?**
A) Patient consent C) Increased data bias
B) Data transparency D) Administrative tasks
- 14. How can AI algorithms assist radiologists in making more informed decisions?**
A) By reducing diagnostic accuracy
B) By increasing medical errors
C) By providing real-time guidance during image interpretation
D) By decreasing patient waiting times
- 15. What is one benefit of integrating multimodal imaging in radiology?**
A) Decreased collaboration between academia and industry
B) Reduced diagnostic accuracy
C) Enhanced comprehensive analysis
D) Increased reliance on manual image interpretation
- 16. How can AI-driven clinical decision support systems benefit radiologists?**
A) By decreasing workflow efficiency
B) By increasing reliance on subjective interpretation
C) By providing real-time guidance during patient management
D) By reducing patient waiting time
- 17. Which factor is essential for ensuring the effectiveness of AI algorithms in radiology?**
A) Reduced data quality
B) Increased algorithmic biases
C) High-quality, diverse datasets for training
D) Decreased regulatory compliance
- 18. What is one potential drawback of AI algorithms in radiology?**
A) Enhanced interpretability
B) Reduced efficiency gains
C) Improved diagnostic accuracy
D) Algorithmic biases
- 19. Which aspect of AI in radiology contributes to enhanced patient care?**
A) Increased medical errors
B) Decreased diagnostic accuracy
C) Improved quality of care
D) Decreased reliance on personalized medicine
- 20. What is a key consideration regarding the data used to train AI algorithms in radiology?**
A) Increased data bias
B) Reduced data transparency
C) High-quality and diverse datasets
D) Decreased reliance on collaborative research initiatives
- 21. How do AI-driven predictive analytics contribute to radiology?**
A) By decreasing reliance on patient data
B) By assessing risk factors and predicting disease outcomes
C) By reducing transparency of decision-making processes
D) By increasing reliance on standardized treatment plans
- 22. What potential impact can AI have on healthcare costs in radiology?**
A) Increased costs due to decreased efficiency gains
B) Reduced costs through workflow optimization and improved diagnostic accuracy
C) Increased costs due to decreased regulatory compliance
D) Reduced costs through increased reliance on manual image interpretation
- 23. What role does transparency play in addressing challenges associated with AI algorithms in radiology?**
A) It increases interpretability and accountability.
B) It decreases reliance on high-quality datasets.
C) It reduces regulatory compliance.
D) It enhances algorithmic biases.
- 24. How can AI contribute to research and innovation in radiology?**
A) By hindering collaboration between academia and industry
B) By reducing reliance on predictive analytics
C) By fueling innovation and the development of advanced imaging techniques
D) By decreasing transparency of decision-making processes



25. Which factor is not a challenge associated with integrating AI in radiology?

- A) Data quality and bias
- B) Increased interpretability
- C) Regulatory compliance
- D) Integration with clinical workflow

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What is Dysautonomia and how does it affect the lower extremities?

Dysautonomia is an umbrella term used to describe any disorder of the autonomic nervous system (ANS). The ANS regulates functions that are automatic in nature such as heart rate, BP, digestion,

Article written by: Alison Sadler PMAC, PRAC

Resources used to write this article came from WebMd, NIH (National Library of Medicine), and Tdp (The Dysautonomia Project)

Let's take a look at some of the most common Dysautonomia disorders that especially affect the lower extremities. As Podiatric Medical Assistants, we need to understand these disorders and how they affect our patients.

Postural orthostatic tachycardia syndrome (POTS)

(POTS) is a common autonomic nervous system disorder characterized by an excessively fast heart rate and a drop in your blood pressure. These symptoms can cause POTS patients to experience symptoms of difficulty balancing, lightheadedness, dizziness or fainting upon standing.

- There are different types of POTS and POTS can have different initial triggers. A patient can have more than one kind of POTS or have Secondary POTS due to a different underlying autoimmune disorder.
- It is unknown what causes POTS; however, some researchers believe it's an autoimmune disorder based on the presence of certain antibodies in people with POTS. The body's defense system attacks healthy tissue when there is an autoimmune disorder present.
- Females between the ages of 15 and 50 years are more likely to have POTS.



- Several overt health systems may lead to being diagnosed with POTS including: Autoimmune diseases, like Sjogren's syndrome or lupus, chronic fatigue syndrome, and illness like Lyme disease, hepatitis C, MS, Epstein Barr virus and even SARS-CoV2, the virus that causes COVID.
- POTS triggers can also include the onset of puberty, major surgery, viral illness or bodily trauma
- POTS sufferers may experience: blurry vision, nausea/vomiting, GI problems, severe sweating, brain fog, fatigue, headaches, body aches, exercise intolerance insomnia, feeling hot or cold, anxious, nervous or jittery.

Lower Extremity symptoms of POTS may include:

- Small fiber neuropathy (SFN), a condition that affects the sensory nerves, causing numbness or burning sensations. About 50% of patients with POTS also have some degree of SFN.
- Many POTS patients can develop a reddish purple coloring in the legs upon standing, believed to be caused by blood pooling or poor circulation. The color change subsides upon returning to a reclined position

Ehlers - Danlos Syndrome (EDS), is an inherited condition that weakens connective tissues, which hold parts of the body together. Connective tissue includes bones and cartilage, as well as blood and fatty tissues. As a result EDS can cause skin to be fragile, easily bruise, and joints to be loose. EDS was named after the two doctors who first described the syndrome Dr. Ehlers and Dr. Danlos. This syndrome is known to include 13 different types of connective tissue disorders. While each are different they all weaken joints and the structure of skin.

There are a total of 6 types of EDS. Two of the types of Ehlers-Danlos syndrome affect our podiatry patients more. Symptoms vary based on which type of EDS is present.

- Hypermobile Ehlers-Danlos syndrome (hEDS) is the most common and causes joints to bend farther than normal, making one hypermobile. This can cause the patient to be prone to sprains or your joints to dislocate, causing

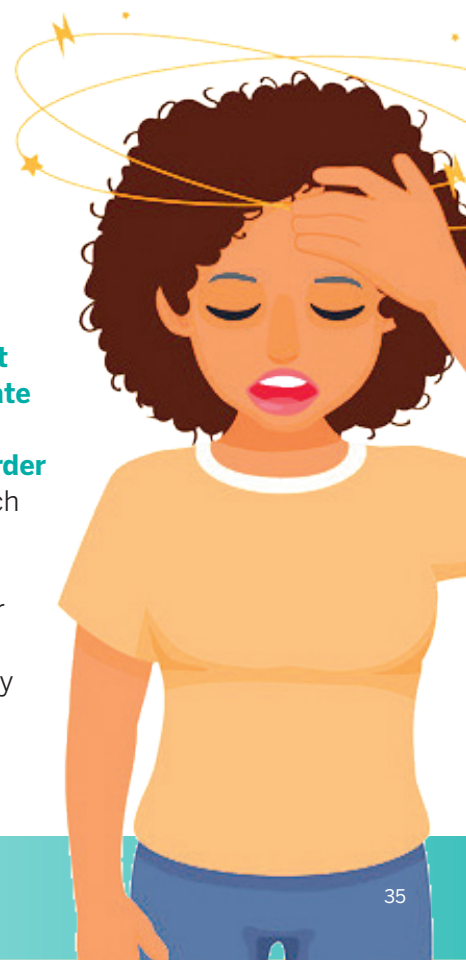
muscle weakness, long –term or chronic joint or bone pain and even flat feet

- Classical Ehlers-Danlos syndrome (cEDS) primarily affects the skin, mostly causing skin to be very fragile and scar easily. It also causes common bruising and can affect wound healing.

With more than 70 million people in the world being affected by Dysautonomia, and other autoimmune disorders, how can the Podiatrist and the Podiatric Medical Assistants help their patients? By educating ourselves about these conditions and their effects on the lower extremity.

After, the DPM evaluates the patient who has a medical history which includes these conditions He/She may prescribe any of the following for POTS or EDS patients:

- **Compression stockings** which help by Enhancing Blood Flow and provide graduated pressure, especially around the ankles, pushing blood upwards and improving circulation back to the heart. They also reduce the risk of swelling and pain from standing up or sitting still for extended periods of time.
- **Dispense/Order or Recommend any of the following items:** ankle braces, orthotics, supportive shoe gear or physical therapy to help stabilize the feet/ankles, improve balance and proprioception
- **Perform an epidermal nerve fiber density test (ENFD) to evaluate for Small fiber neuropathy or order NCS/EMG's** which can be treated with topical or oral medication or other treatments deemed necessary



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