TOPICS IN BONE HEALTH: Common Skeletal Complaints of Childhood — When to be Concerned and Where to Refer

Friday, Oct. 4, 2024

HUB for Clinical Collaboration On the CHOP Philadelphia Campus

Learn more: chop.cloud-cme.com

COURSE OVERVIEW

This conference is intended for primary care providers, endocrinologists, nurse practitioners, family medicine physicians and internists, dietitians, and other healthcare providers. The program aims to provide a necessary understanding of common skeletal complaints of childhood, with emphasis on musculoskeletal pain, bone lesions and deformities, and fractures, with review of medical and surgical evaluations and treatment options for specific conditions. Emphasis will be placed on genetic causes of bone disease and disorders of mineral metabolism, as well as the impact of chronic illnesses on bone health. The conference is intended to familiarize providers with therapeutic options, including nutritional interventions, physical therapy, orthopedic, and pharmacological protocols. The learning format will be didactic lectures with question-and-answer sessions.

OBJECTIVES

Upon completion of this course, participants will be able to:

- 1. Distinguish the differential diagnosis of musculoskeletal pain and multidisciplinary treatment options.
- 2. Explain the evaluation, treatment, and monitoring of complex bone lesions.
- 3. Describe the differential diagnosis of bone deformities, including orthopedic and metabolic bone considerations.
- 4. Discuss risk factors for increased bone fragility and fractures and potential evaluations and treatments.
- 5. Review genetic bone diseases and available and emerging therapies.

REGISTRATION

The conference will be held at Children's Hospital of Philadelphia in the HUB Auditorium. The registration fee includes registration materials, breakfast, lunch, breaks and reception.

REGISTRATION FEES

For those attending the conference in person: \$175.

The registration fee includes continental breakfast, refreshments, lunch, and course materials.

For those attending the conference virtually: \$175.

The fee includes livestream access to the conference and access to view online course materials.

Joint Accreditation Statement



In support of improving patient care, this activity has been planned and implemented by Children's Hospital of Philadelphia. Children's Hospital of Philadelphia is jointly accredited by the JOINTLY ACCREDITED PROVIDER, Accreditation Council for Continuing Medical Education (ACCME).

INTERPROFESSIONAL CONTINUING EDUCATION the Accreditation Council for Pharmacy Education (ACPE), and the

American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.



DESIGNATION OF CREDIT

Physicians: Children's Hospital of Philadelphia designates this live activity for a maximum of 6.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

HOTEL ACCOMMODATIONS

A block of rooms has been reserved at reduced rates at The Study located just a few blocks from Children's Hospital. The group overnight rate is \$239 single and double occupancy plus a 16.25% room tax. Participants are required to make their own hotel reservations by calling The Study directly at 215-387-1400. Please mention the name of the conference when making your reservation. The special room rate will be available until Wednesday, Sept. 4, 2024. After that date, reservations will be accepted on a space and rate availability basis.



CANCELLATION AND REFUND POLICY

Children's Hospital of Philadelphia reserves the right to cancel or postpone any course due to any unforeseen circumstances. In the event of cancellation or postponement, Children's Hospital of Philadelphia will refund registration fees, but is not responsible for any related costs, charges, or expenses to participants, including cancellation charges assessed by airlines or travel agencies. To process refunds for course withdrawals, cancellations must be received in writing by Friday, Sept. 20, 2024. No refunds will be issued thereafter.

SERVICES FOR PEOPLE WITH DISABILITIES

Participation by all individuals is encouraged. If arrangements are required for an individual with special needs to attend this meeting, please call the CME Department at 215-590-5263 two weeks in advance so that we may provide better service to you during the conference.

REGISTER NOW – chop.cloud-cme.com



PROGRAM | Friday, Oct. 4, 2024

- 7:30 a.m. REGISTRATION AND BREAKFAST
- 8 a.m. Welcome and Introduction Andrew C. Calabria, MD

SESSION I – MUSCULOSKELETAL PAIN

- 8:05 a.m. Case Presentation Allie Dayno, MD
- 8:10 a.m. Stress Fractures/Overuse Naomi Brown, MD
- 8:30 a.m. Interdisciplinary Management of Amplified Musculoskeletal Pain Syndrome Sabrina Gmuca, MD, MSCE
- 8:50 a.m. The Role of Physical Therapy in the Treatment of Amplified Musculoskeletal Pain Syndrome (AMPS) Ranit Lieberman, PT, DPT, NCS
- 9:10 a.m. Clinical Implications Learned from Coupling of Bone Remodeling to Skeletal Angiogenesis and Innervation Janet Crane, MD
- 9:30 a.m. Panel Discussion/Q&A
- 9:50 a.m. BREAK

SESSION II – FRACTURES & DEFORMITIES

- 10:15 a.m. Case Presentation Michael Munoz, MD
- 10:20 a.m. Osteogenesis Imperfecta and Related Conditions Staci Kallish, DO
- 10:40 a.m. Pharmacotherapy of Skeletal Fragility: Bisphosphonates and Emerging Therapies David R. Weber, MD, MSCE
- 11 a.m. Case Presentation Netanya Pollock, MD
- 11:05 a.m. Bows, Bends, and Boomerangs: A Guide to Pediatric Lower Extremity Angular Deformities Christine M. Goodbody, MD, MBE

- 11:25 a.m. Scoliosis: Diagnosis and Management Brian T. Vernau, MD, CAQSM
- 11:45 a.m. Panel Discussion/Q&A

Noon LUNCH

SESSION III - BONE LESIONS

- 1 p.m. Case Presentation Netanya Pollock, MD
- 1:05 p.m. Multimodality Approach to Bone Imaging *Jie C. Nguyen, MD, MS*
- 1:25 p.m. Bone Tumors Alexandre Arkader, MD
- 1:45 p.m. Fibrous Dysplasia/McCune-Albright Syndrome: New Insights and Updates on Management Alison Boyce, MD
- 2:05 p.m. Panel Discussion/Q&A
- 2:20 p.m. BREAK

SESSION IV - DISORDERS OF MINERAL HOMEOSTASIS

- 2:35 p.m. Case Presentation Allie Dayno, MD
- **2:40 p.m.** Mineral Madness A Primer on Metabolic Bone Disease Andrew C. Calabria, MD
- 3 p.m. Vitamin D When to be Concerned? Jeffrey Roizen, MD, PhD
- **3:20 p.m.** Updates on Hypoparathyroidism Edna E. Mancilla, MD
- 3:40 p.m. Generalized Arterial Calcification of Infancy: Current Insights and Future Treatments Michael A. Levine, MD
- 4 p.m. Panel Discussion/Q&A
- 4:25 p.m. Closing Remarks
- 4:30 p.m. Adjourn



Unless otherwise noted, faculty is from Children's Hospital of Philadelphia and/or the Perelman School of Medicine at the University of Pennsylvania.

COURSE DIRECTORS

Andrew C. Calabria, MD

Attending Physician Clinical Director, Division of Endocrinology and Diabetes Center for Bone Health Professor of Clinical Pediatrics

David R. Weber, MD, MSCE

Attending Physician and Medical Director, Center for Bone Health Division of Endocrinology and Diabetes Associate Professor of Pediatrics

FACULTY

Alexandre Arkader, MD Attending Orthopaedic Surgeon Co-Director, Bone and Soft Tissue Tumors Program Associate Professor of Orthopaedic Surgery

Alison Boyce, MD Chief, Metabolic Bone Disorders Unit Lasker Clinical Research Scholar National Institute of Dental and Craniofacial Research National Institutes of Health (Bethesda, MD)

Naomi Brown, MD

Pediatric Sports Medicine Specialist Director of Primary Care Sports Medicine Assistant Professor of Clinical Pediatrics

Janet Crane, MD

Director of the Center for Pediatric Bone Health Associate Professor, Department of Pediatrics, Division of Endocrinology and Department of Orthopaedic Surgery, Center for Musculoskeletal Research, Johns Hopkins University (Baltimore)

Allie Dayno, MD Fellow, Department of Pediatrics Division of Endocrinology and Diabetes

Sabrina Gmuca, MD, MSCE Attending Physician, Division of Rheumatology Assistant Professor of Pediatrics

Christine M. Goodbody, MD, MBE

Attending Physician, Department of Surgery Assistant Professor of Orthopaedic Surgery

Staci Kallish, DO

Attending Physician, Division of Human Genetics Associate Professor of Clinical Medicine Penn Medicine, Department of Medicine, Division of Translational Medicine and Human Genetics

Michael A. Levine, MD

Chief Emeritus, Division of Endocrinology and Diabetes Center for Bone Health Professor Emeritus, Pediatrics and Medicine

Ranit Lieberman, PT, DPT, NCS Physical Therapist

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