

14<sup>th</sup> International Conference on

# Clinical Pediatrics

June 14-16, 2018 | Rome, Italy



## Sasigarn A Bowden

*The Ohio State University, USA*

### **Pediatric osteoporosis: What we know and what's on the horizon**

Osteoporosis is defined as a systemic skeletal disease characterized by compromised bone strength, and microarchitectural deterioration of bone, leading to fragility fractures. Once thought to be a unique health problem in older adults, osteoporosis has now been recognized as a condition also seen in pediatric patients. Osteoporosis in children has a broad range of etiologies, and is classified into 2 groups: primary osteoporosis or genetic bone disease, and secondary osteoporosis due to underlying chronic diseases. The diagnosis of osteoporosis in children should not be made on the basis of densitometric criteria alone. The presence of bone fragility with a history of clinically significant fractures and significantly low bone density are required for diagnosis of pediatric osteoporosis. Vertebral fracture in the absence of high energy trauma or local disease is pathognomonic for osteoporosis and can allow the diagnosis without detection of significantly low bone density. Monitoring for bone health should include screening for vertebral fractures that are common and often asymptomatic in children with risk factors for osteoporosis. Other diagnostic studies include biochemical markers of bone turnover, bone mineral density by dual-energy x-ray absorptiometry, as well as spinal imaging using densitometric lateral spinal imaging. Optimizing bone health in children with osteoporosis includes treating the underlying condition causing bone fragility, and ensuring adequate weight-bearing exercise, vitamin D and calcium intake. Pharmacologic agents should be offered to patients with fragility fractures. Bisphosphonates have been used successfully in pediatric patients. This lecture reviews the latest advances in the assessment and treatment of pediatric osteoporosis.

### **Biography**

Sasigarn A Bowden, MD is a Pediatric Endocrinologist at the Nationwide Children's Hospital, and an Associate Professor of Pediatrics at The Ohio State University College of Medicine. She is Board Certified by the American Board of Pediatrics (ABP) and Sub-Board of Pediatric Endocrinology. Her clinical and research interests include metabolic bone disorders, pediatric osteoporosis, and diabetes. She is the Associate Program Director for the fellowship program and a Pediatric Bone Expert for the Metabolic Bone Clinic at Nationwide Children's Hospital. She is the Chief Editor for eMedicine and has published more than 60 articles and abstracts in reputed journals.

[Sasigarn.Bowden@nationwidechildrens.org](mailto:Sasigarn.Bowden@nationwidechildrens.org)