

20 years experience in Metabolic Bone – Nick Shaw

Over the past twenty years there have been significant developments in the understanding and management of paediatric calcium and bone disorders. Advances in physiology have led to the identification of the calcium sensing receptor, the Wnt signalling pathway in osteoblasts, the RANKL/RANK pathway in osteoclasts and the unravelling of the role of FGF23 in phosphate metabolism.

New genetic techniques have led to discovering and extending the underlying genetic basis of many disorders such as Osteogenesis Imperfecta. International collaborations have defined the role of bone densitometry in the identification and management of osteoporosis in children.

Advances in knowledge have also led to the development of new treatment options eg Asfotase Alfa for Hypophosphatasia and Burosumab for X-linked Hypophosphataemic rickets.

Alongside the development of metabolic bone clinics has been the development of educational and networking opportunities such as the British Paediatric and Adolescent Bone Group and the International Conferences on Children's Bone Health both of which have developed in the past twenty years.

This has been an exciting time for interested clinicians and basic scientists and the importance of paediatric metabolic bone and calcium disorders is evident now as a key component of national and international meetings such as BSPED and ESPE.