

Metabolic bone diseases: basic and clinical aspects

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Osteoporosis is a disease of the bone, in which the bone mineral density (BMD) is reduced, bone microarchitecture is disrupted and the amount and variety of non-collagenous proteins in bone is altered.

It is estimated that 1 in 3 women and 1 in 12 men over the age of 50 worldwide have osteoporosis. Although any bone can be affected, the disease is responsible for millions of fractures annually, mostly involving the lumbar vertebrae, hip and wrist.

The current issue of the Wiener Medizinische Wochenschrift deals with the definition, epidemiology, risk factors as well as the diagnosis and treatment of osteoporosis. International experts contributed to this thematic issue.

In the first manuscript, Markus Seibel (Professor and Chair of Endocrinology of the University of Sidney) discusses bone-turnover in nutrition-related disorders with special attention to hypovitaminosis D and its effect in children and adolescent persons [1].

The paper of Jaroslav Blahoš (Director of the Endocrine Unit and Osteocentre in the Central Military Hospital, Prague) gives an overview of both the treatment and the prevention of osteoporosis [2].

Wolfgang Pollähne (former Head of the Department of Radiology, Fürstenhof Clinic) deals with the use of imaging procedures in the diagnosis of osteoporosis (DXA) [3].

The last two contributions [4, 5] by myself (associate professor of the Comenius University Bratislava, expert in biomechanics) give an insight into the osteoporosis outcome among the female population in Bratislava with special emphasis on the age related BMD changes and the assessment of relative fracture risk with T-plus Z-scores.

Although treatment options for osteoporosis in the past few years have improved a considerable number of patients are still underdiagnosed and undertreated. We hope that this thematic issue of the Wiener Medizinische Wochenschrift may contribute to an improved management of patients with osteoporosis.

References

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4. Wendlová J (2007) Osteoporosis in a female population from Bratislava – age-related BMD changes. *Wien Med Wochenschr* 157: 606–610
5. Wendlová J (2007) T-plus Z-score in the assessment of relative fracture risk. *Wien Med Wochenschr* 157: 611–617