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INTRODUCTION

Bone and Diabetes: Diabetic Pathology Provides Cues on How Bone Metabolism is Integrated with Energy Metabolism System

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This CRBMM issue on "Bone and Diabetes" has been assembled in response to the growing interest of research community in relationship between mechanisms regulating energy balance and bone homeostasis. Recent progress in unraveling this cross-talk is placing diabetes as a pathology which may further illuminate this connection. Indeed, there is substantial evidence pointing for diabetes affecting skeleton and skeleton regulating glucose metabolism. In this issue, we are presenting reviews covering different aspects of this relationship. This includes two articles reviewing basic and clinical evidence on the role of osteoblasts and osteoblast-specific hormone osteocalcin in regulation of glucose metabolism, followed by the update on clinical aspects of diabetic bone disease and the analysis of the role of vitamin D in metabolic homeostasis of diabetic bone. Finally, we are presenting the current insight into structural changes in the bone matrix which may explain loss of quality and increased fragility of diabetic bone, and the update on the effects of clinically approved anti-diabetic therapies on bone. We realize that we have not covered all aspects of bone and energy metabolism relationship; however, this compilation should serve as a competent attempt to present this new and fast evolving research to the broader audience of readers.

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