

From the Editor-in-Chief

An association between low bone mineral density and all-cause mortality, especially due to stroke, has been described in elderly women. Furthermore, aortic calcification may be more common among women with osteoporotic vertebral fractures, and the degree of aortic calcification is inversely related to bone mineral density. Osteoporosis and cardiovascular disease thus seem to be associated.

Here we collected papers focused on this relationship from different angles. Two reports, one from P. Piscitelli and the other from G.N. Farhat, highlight the epidemiologic literature on the association of cardiovascular phenotypes and osteoporosis, also summarizing the potential mechanisms involved in the link between low bone mineral density and cardiovascular disease.

Molecular biology of bone remodelling and of atherosclerosis are described in two reports, respectively by N. Rucci and E. Mannarino. New discoveries about genetic triggers may help us spot trouble before it starts, as elegantly described in the article by R. Abbate.

It has been known for many years that calcification of large arteries is common among patients with endstage renal disease. A critical analysis of the cause factors that underlie this association is reviewed by K.A. Hruska.

The innovative instrumental diagnostic tools to evaluate the co-segregation of low bone mineral density and arterial calcification summarized by C. Cepollaro mark the future approaches in the evaluation of the single patient as potentially at risk for fragility fractures and/or for cardiovascular disorders.

Finally, C.E. Fiore analyzed the role of old and new drugs in facing bone loss and atherosclerosis. We are confident that an informed approach to the treatment of elderly patients will help in the future to offer clear concepts to readers often left confused. This critical analysis will lessen the apparent divergence of views and point the way to a possible synthesis. Testable hypotheses are presented whose evaluation may help clarify this vital field of study.

We think aggressive control of vascular risk factors in addition to the known existing osteoporosis risk factors may help to reduce the morbidity and mortality associated with these diseases. The cross-fertilization of two exploding areas of basic and clinical research will contribute to form and inform the future generations of physicians.

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