Experience of famine and bone health in post-menopausal women
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We read with great interest the article by Kin et al.¹ In their study of 1826 Hong Kong women aged 65 years or older, those who experienced famine during World War II had a significantly higher rate of developing osteoporosis than those who had not experienced famine. Recently we reported similar findings among Jewish women aged 60 years or older, residing in Israel.² We examined two groups of women: 73 Holocaust survivors (mean age 72.2±6.3 years) and a control group of 60 European-born Jews who were not in the Holocaust (mean age 71.6±7.1 years). Among the Holocaust survivors 54.8% had osteoporosis, 39.7% osteopenia, and 5.5% normal bone mineral density (BMD); whereas among controls 25% had osteoporosis, 55.0% osteopenia, and 20% normal BMD (P=0.0001). Interestingly, the effect of severe malnutrition on the skeleton was mainly found in those who were less than 17 years old during World War II. In this age group, among Holocaust survivors 58.0% had osteoporosis, 34.0% osteopenia, and 8.0% normal BMD; whereas among controls in the same age group, 20.0% had osteoporosis, 57.8% osteopenia, and 22.2% normal BMD (P=0.0003). In those who were 17 years old or older during World War II, there was not a statistically significant difference in the prevalence of osteoporosis between Holocaust survivors and controls; among the Holocaust survivors 47.8% had osteoporosis, 52.2% osteopenia, and none had a normal BMD; whereas among controls 40% had osteoporosis, 46.7% osteopenia, and 13.3% normal BMD (P=0.28).

Kin et al.¹ stratified their sample into three age groups: 65-69, 70-74, and ≥75 years. It would be interesting to know if the effect of famine on the skeleton was found in all age groups or was limited to the younger age groups.

References

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