Bone ultrasound velocity of appropriately grown for gestational age concordant twins

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In neonates, quantitative ultrasound has been shown to be predictive of bone breakability and an index of biophysical property of bone. There are no data on bone speed of sound (SOS) in appropriate for gestational age (AGA) twins. The purpose of this study was to test the hypothesis that AGA twins who had normal intrauterine growth have bone SOS similar to that of AGA singletons. We measured tibial midshaft bone SOS within the first 96 hours of life in 25 pairs of AGA twins, 27 to 40 weeks gestation, and compared them with our data of 73 singletons. There were no significant differences in bone SOS between twin and singleton infants in any of the parameters studied. We found no significant difference in bone SOS between twins of the same pair. AGA twins have bone SOS very similar to that of AGA singletons. We suggest that intrauterine weight sparing occurs also in terms of biophysical properties of bone.

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