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We read with interest the article by van der Jagt et al[1] describing the visualization of the scala media of the cochlea in living human subjects by non-contrast-enhanced T2-weighted imaging at 7T. For recognition of the scala media with this technique, visualization of the Reissner membrane is necessary. The Reissner membrane is very thin, 4–12 μm.[2]

Visualization of this thin membrane in a human cadaveric specimen has been reported by using microfocus x-ray CT with 12.2-μm spatial resolution and a 9.4T small-bore MR imaging unit with 23-μm spatial resolution.[2,3] The spatial resolution used in this article on a 7T system was 300 μm. The presumed Reissner membrane shown in Fig 2 is not clear. Furthermore, there are several stripelike artifacts in the vestibule in Fig 2*B*.

To further increase the confidence and significance of this article, verification of the visualization of the Reissner membrane by comparing non-contrast-enhanced T2-weighted imaging and contrast-enhanced FLAIR[4] in the same subjects might be very valuable. If the visualization of the Reissner membrane by non-contrast-enhanced MR imaging at 7T is feasible, it might be a "killer application" for its widespread use in the clinical field.

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