



## RE: Diffusion-Weighted MRI in Intrahepatic Bile Duct Adenoma Arising from the Cirrhotic Liver

Sait Menzilcioglu, MD, Mahmut Duymus, MD,  
Serhat Avcu, MD, Sema Yildiz, MD

All authors: Department of Radiology, Gazi University School of Medicine, Ankara 06100, Turkey

We have read with great interest the recent case report of An et al. (1) revealing an intrahepatic bile duct adenoma (BDA) arising from a cirrhotic liver that was studied using both diffusion-weighted imaging (DWI) and gadolinium-ethoxybenzyl-diethylene triamine pentaacetic acid-enhanced magnetic resonance imaging. They stated that the BDA showed an apparent diffusion coefficient (ADC) two-fold greater than that of the background liver parenchyma on DWI. In our opinion, some points about the report are not sufficiently clear.

They declared that the ADC values of the BDA may have been higher than the background liver parenchyma due to its histological features. Nevertheless, they report a patient with alcoholic liver cirrhosis, and ADC values of patients with cirrhosis are lower than those of patients with a

healthy liver (2) and nonfibrotic liver lesion ADCs (3). This feature may have affected the difference in ADC values, which might not have been seen between the ADC values of the BDA and the background liver parenchyma.

Bile duct adenoma is histologically recognized as a benign lesion composed of noncystic ductules, and variable degrees of inflammation and fibrosis. This histological spectrum of the lesion could also alter the ADC values of different BDA lesions (4).

We hope that these comments will add to the value of the article by An et al. (1).

### REFERENCES

1. An C, Park S, Choi YJ. Diffusion-weighted MRI in intrahepatic bile duct adenoma arising from the cirrhotic liver. *Korean J Radiol* 2013;14:769-775
2. Taouli B, Vilgrain V, Dumont E, Daire JL, Fan B, Menu Y. Evaluation of liver diffusion isotropy and characterization of focal hepatic lesions with two single-shot echo-planar MR imaging sequences: prospective study in 66 patients. *Radiology* 2003;226:71-78
3. Sandrasegaran K, Akisik FM, Lin C, Tahir B, Rajan J, Saxena R, et al. Value of diffusion-weighted MRI for assessing liver fibrosis and cirrhosis. *AJR Am J Roentgenol* 2009;193:1556-1560
4. Allaire GS, Rabin L, Ishak KG, Sesterhenn IA. Bile duct adenoma. A study of 152 cases. *Am J Surg Pathol* 1988;12:708-715

Received February 27, 2014; accepted after revision March 9, 2014.

**Corresponding author:** Sait Menzilcioglu, MD, Department of Radiology, Gazi University School of Medicine, Ankara 06100, Turkey.

• Tel: (90) 3124844928 • Fax: (90) 3124844929  
• E-mail: dr.m.sait@hotmail.com

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.