KJA
Korean Journal of Anesthesiology

Comment on "A rare case of Wilson disease associated with intracerebral hemorrhage"

Shweta A Singh

Department of Anesthesiology, Center for Liver & Biliary Sciences, Max Super Speciality Hospital, Saket, New Delhi, India

Letter to the Editor

Korean J Anesthesiol 2021;74(3):278-279
https://doi.org/10.4097/kja.20472
pISSN 2005-6419 • eISSN 2005-7563

Received: August 22, 2020
Accepted: October 13, 2020

Corresponding author:
Shweta A Singh, M.D.
Department of Anesthesiology, Center for Liver & Biliary Sciences, Max Super Speciality Hospital, Saket, New Delhi 110017, India
Tel: +91-9810625177
Fax: +91-011-66115577
Email: drshwetasingh29@gmail.com
ORCID: https://orcid.org/0000-0002-9339-8526

The case reported by Singh et al. [1] describing a rare case of Wilson's disease with intracranial hemorrhage (ICH), which concluded that penicillamine administration in this particular patient may have caused bone marrow suppression and low platelet count was very interesting. Bone marrow suppression and thrombocytopenia are known complications of penicillamine use reported in up to 10% of cases [2] that can cause bleeding, including ICH. However, the level of coagulopathy based on laboratory parameters (platelet count: 43 × 10^9/L, international normalized ratio [INR]: 1.65) was not severe enough to have caused massive bleeding leading to intraventricular extension in a patient with cirrhosis [3].

The authors have also commented that marijuana users are more likely to have ICH. The patient being an alcohol user as well could have had inadvertent head injuries [4]. Although not independent predictors of ICH, marijuana and alcohol use are more likely to cause ICH.

Additionally, we would like to point out that in a young patient presenting with ICH, a search for an intracranial aneurysm should have been considered and cerebral angiography could have been performed.

It is also our observation that the trigger for transfusion was the absolute levels of platelets and INR in the presence of an intracranial bleed in a patient with cirrhosis. However, the current practice is to transfuse products based on viscoelastic hemostatic assays such as TEG or ROTEM, as such patients could be in a procoagulant state despite the deranged coagulation parameters [5].

Conflicts of Interest

No potential conflict of interest relevant to this article was reported.

References

1. Singh S, Krishna VS, Gupta N, Taank P, Marwah V. A rare case of Wilson disease associated with intracerebral hemorrhage. Korean J Anesthesiol 2020; 73: 357-8.
2. Czlonkowska A, Gajda J, Rodo M. Effects of long-term treatment in Wilson's disease with D-penicillamine and zinc sulphate. J Neurol 1996; 243: 269-73.
3. Niizuma H, Suzuki J, Yonemitsu T, Otsuki T. Spontaneous intracerebral hemorrhage and liver dysfunction. Stroke 1988; 19: 852-6.
4. Chen CJ, Brown WM, Moomaw CJ, Langefeld CD, Osborne J, Worrall BB, et al. Alcohol use and risk of intracerebral hemorrhage. Neurology 2017; 88: 2043-51.
5. Kawano-Castillo J, Ward E, Elliott A, Wetzel J, Hassler A, McDonald M, et al. Thrombe-

lastography detects possible coagulation disturbance in patients with intracerebral hemorrhage with hematoma enlargement. Stroke 2014; 45: 683-8.