

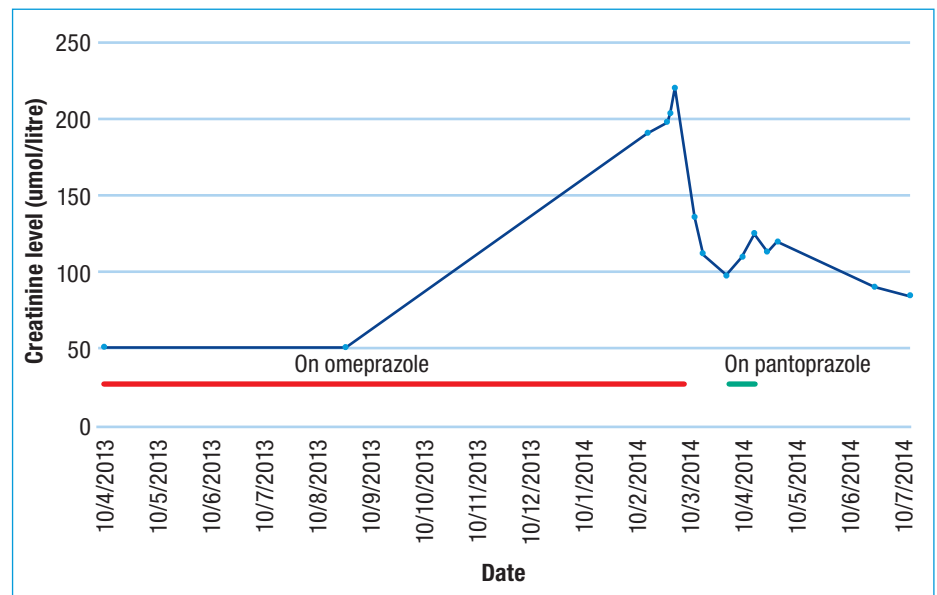
LEARNING POINTS

- Drug-induced acute interstitial nephritis is an important and easily overlooked cause of acute kidney injury.
- Acute interstitial nephritis is a rare but important side effect of proton pump inhibitor therapy.
- Reintroduction of a different proton pump inhibitor to an individual who has already developed proton pump inhibitor-induced acute interstitial nephritis is likely to cause disease recurrence.

differences in molecular structure between these drugs, and it should caution physicians who are considering reintroducing a different proton pump inhibitor to a patient who has had previously demonstrated proton pump inhibitor-induced acute interstitial nephritis. [BJHM](#)

Badov D, Perry G, Lambert J, Dowling J (1997) Acute interstitial nephritis secondary to omeprazole. *Nephrol Dial Transplant* **12**: 2414–16 (doi: 10.1093/ndt/12.11.2414)

Figure 1. Creatinine levels with proton pump inhibitor exposure.



Christensen PB, Albertsen KE, Jensen P (1993) Renal failure after omeprazole. *Lancet* **341**: 55 (doi: 10.1016/0140-6736(93)92531-W)

Landray MJ, Ringrose T, Ferner RE, Arnold IR (1998) Pyrexia, anaemia and acute renal failure secondary to omeprazole. *Postgrad Med J* **74**(873): 416–18 (doi: 10.1136/pgmj.74.873.416)

Ra A, Tobe SW (2004) Acute interstitial nephritis due to pantoprazole. *Ann Pharmacother* **38**: 41–5 (doi: 10.1345/aph.1D085)

Sierra F, Suarez M, Rey M, Vela MF (2007) Systematic review: proton pump inhibitor-associated acute interstitial nephritis. *Aliment Pharmacol Ther* **26**: 545–53 (doi: 10.1111/j.1365-2036.2007.03407.x)

Images in Medicine

Dark necrotic mucosa in sinonasal mucormycosis

A 75-year-old man presented with a 2-week history of right-sided orbito-facial pain, epistaxis and nasal obstruction. Nasal endoscopic examination showed a black necrotic nasal mucosa. Pathological examination revealed the diagnosis of mucormycosis. The patient underwent wide endoscopic debridement and received a high dose of liposomal amphotericin B.

Sinonasal mucormycosis is an uncommon devastating fungal infection. The best treatments for mucormycosis are early diagnosis, correction of underlying diseases, proper surgical debridement and aggressive

antifungal agent therapy. Sinonasal mucormycosis should be considered in patients with predisposing factors and manifesting sinonasal findings of necrotic and devitalized tissue. [BJHM](#)

Figure 1. Black necrotic crusts with the fungal spores present at the right middle turbinate, septum and lateral nasal wall.

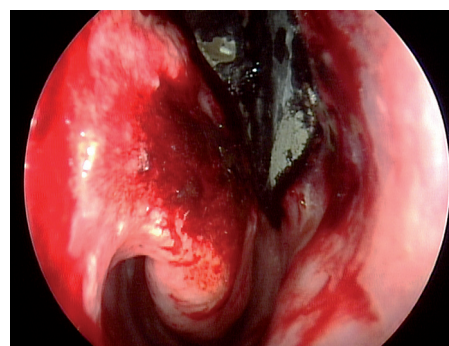
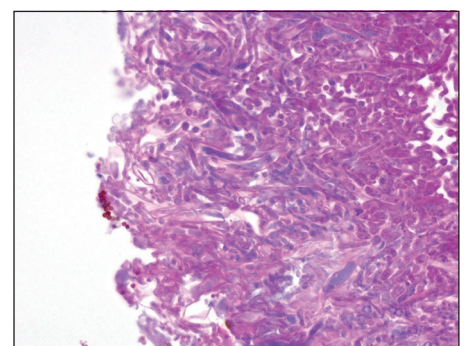


Figure 2. Pathological examination revealed the wide non-septate hyphae with obtuse angled branches. (Periodic acid-Schiff stain, × 400).



Dr Ju Wan Kang is Clinical Assistant Professor

Dr Jeong Hong Kim is Associate Professor in the Department of Otorhinolaryngology, Jeju National University School of Medicine, Jeju 690-756, South Korea

Correspondence to: Dr JH Kim (jeonghongkimmd@gmail.com)