emotional or physical stress and this has led to theories that the mechanism is metabolic. Emotional and behavioural stress has been shown to lead to an increase in glutamatergic transmission in CA1 neurons in the hippocampus (Calabresi et al, 2003). It has been suggested that this stress response, which is specific to this area, could trigger a pathological cascade leading to an acute disruption in CA1 synaptic mechanisms, and the clinical syndrome of transient global amnesia (Bartsch and Deuschl, 2010). However, the reason for the vulnerability of the CA1 region of the hippocampus remains unclear.

Transient global amnesia is a management problem for clinicians faced with what would appear to be an episode of acute cerebral ischaemia. Neuroimaging has indicated the site of the pathology, but the pathophysiological mechanisms leading to this dramatic syndrome remain unclear. Despite its benign prognosis, transient global amnesia leads to extensive investigation and significant stress for patients and families. Patients should be reassured that there is no risk of recurrence and no associated risk of cerebral ischaemia. **BJHM**

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LEARNING POINTS

- There is no increased risk of cerebrovascular disease in patients with transient global amnesia.
- The changes seen on magnetic resonance imaging in transient global amnesia cannot simply be explained by cerebral ischaemia.
- Differentiating transient global amnesia from other causes of memory disturbance can reduce unnecessary investigation and treatment.

Hand trauma always requires ring removal

Figure 1. Clinical photograph showing swelling in the fingers with rings in situ and severe skin maceration around the ring on the right middle finger.

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A 62-year-old woman attended the emergency department 2 days after trapping both hands in a heavy wardrobe. She had been wearing multiple rings on all fingers of both hands and was unable to remove them herself. On examination, the fingers with rings in situ were swollen and had altered sensibility. There was maceration of the skin under the rings on two of her fingers (*Figure 1*). Removal of her rings ultimately required a general anaesthetic and use of a reinforced ring cutter.

This image serves as a reminder to doctors in all specialties that all rings should be removed immediately after any hand trauma (Kalkan et al, 2013). Early referral for specialist review is required if removal is not possible with simple methods. **BJHM**

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