

To the *Editor*,

We read with interest the recent case series by Oblak and colleagues (1) describing four patients with early onset cerebral amyloid angiopathy (CAA) following childhood head trauma. However, we feel the authors did not consider an important differential diagnosis in these cases, namely iatrogenic CAA.

Iatrogenic CAA has now been described in several patients (2-14) with a history of medical procedures (including neurosurgery) in childhood, often (but not always) involving cadaveric human materials. It is thought that the amyloid-beta protein that causes CAA was inadvertently transmitted during these earlier procedures, a hypothesis supported by experimental evidence in animal models demonstrating that amyloid-beta can act as a proteopathic seed and result in CAA (15). The clinical presentation in iatrogenic cases is similar to sporadic cases (i.e. with intracerebral haemorrhage, often recurrent), but presentation with seizures and rapidly progressive cognitive impairment have also been described. Symptom onset is usually three or four decades following amyloid-beta exposure. Whilst the full range of potentially causative exposures is unknown (16), there are cases reported in people who have undergone neurosurgical procedures which did not involve cadaveric material, which might support the possibility that amyloid-beta transmission occurred via contaminated neurosurgical instruments (5).

All four of the cases described by Oblak and colleagues had significant head injuries; whilst neurosurgical intervention is noted in one case, there are no details on whether the remaining cases required neurosurgical or other medical procedures at the time of initial injury or subsequently; in cases where procedures did take place, it would be important to know whether these involved cadaveric material (for example, dura mater). We would recommend the authors consider iatrogenic CAA as an important alternative explanation for

early onset CAA in their patients and review the historical medical records of these cases for evidence of relevant exposures.

Yours sincerely,

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Conflict of interest: None

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