Supervised learning technique for the automated identification of white matter hyperintensities in traumatic brain injury

Purpose
To describe a technique for identifying white matter hyperintensities (WMH), which may be associated with ageing and injury, in individuals with TBI.

Participants
Twenty-four service members and Veterans with TBI.

How was the study conducted?
Using MRIs of the brains of participants, the researchers developed this new method to enable more efficient and precise counts of WMHs in the brains.

Findings
The new method showed that it was able to accurately count WMHs, differentiate between the sizes of the WMH lesions, and develop data that contains much more information than typical qualitative descriptions of these lesions.

Military Impact
This new method may help improve MRI-based approaches for determining a diagnosis, prognosis, and response to therapy in patients with TBI.

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