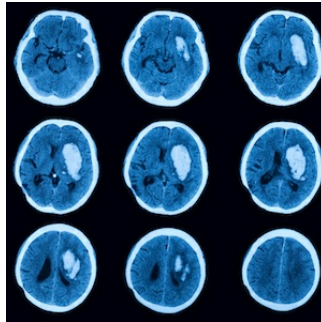## ICH Diagnosis: Could AI Step In Where Radiologists Fail?

The heavy workload radiologists deal with means that the potential for errors may increase.   Misdiagnosis of intracranial haemorrhage (ICH) can lead to an adverse impact on patient outcomes.

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Researchers at Yale School of Medicine have released a study on misdiagnosis of ICH by radiologists and proposed an artificial intelligence (AI) solution.

The team used an FDA approved AI solution based on a convolutional neural network to determine the frequency of ICH in scans, originally reported as negative.

The researchers applied the AI solution to 6565 non-contrast CT scans retrospectively. Originally, 5585 scans were reported as "negative-by-report" cases. The tests were performed at eight imaging sites affiliated to Yale.

The results were as follows:

- AI indicated the presence of ICH in 28 "negative-by-report" scans.
- Three neuroradiologists conducted a consensus review and found that 16 of the scans had un-reported ICH.
- The most commonly missed ICH was overlying the cerebral convexity and in the parafalcine regions.

The research team said false negatives could be reduced with the AI solution by serving as a prospective peer review tool for non-contrast head CT scans.

Source: Science Direct

Image credit: iStock

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