

Lay Summary

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The histopathology underlying Amyloid Related Imaging Abnormalities (ARIA) in Alzheimer's Disease

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Patients with Alzheimer's disease that receive experimental treatment often develop abnormalities on brain scans. These abnormalities are known as ARIA, which stands for Amyloid Related Imaging Abnormalities. So far, we do not know what causes ARIA. A better understanding of what causes ARIA can help us to prevent them in the future and to improve treatments for patients with Alzheimer's disease. The goal of this study is to investigate the microscopic basis of ARIA. To do this, we have scanned brain tissue of Alzheimer's disease patients who received treatment during life. On these scans we found lesions that look like ARIA, and we have examined these lesions under the microscope. We are now requesting additional brain samples from healthy individuals that did not receive any treatment during life. We will scan these samples to confirm the absence of similar lesions in these samples. This is important, as it will tell us that the microscopic findings in areas with ARIA are indeed the result of the treatment.