



3 syngo SWI showing multiple cortical and subcortical bleedings.

hypointense lesion can be found. However, SWI looked completely different: multiple smallest cortical and subcortical bleedings were visualized in the temporal, parietal and less prominent in the frontal lobe (figure 3).

In conclusion the findings in our patient are a mixture of unspecific vascular / age related findings (periventricular gliosis, reduced brain volume, microinfarcts) and CAA. However, extent and severity of CAA is only visualized by *syngo* SWI in detail and would have been clearly underestimated based on conventional MRI only.

Conclusion

syngo SWI has shown in this case to be a sensitive tool for precise assessment of CAA. In general, SWI can provide useful additional information in the evaluation of various pediatric and adult neurologic conditions and can be incorporated easily into the routine imaging assessment. It is known that SWI is more sensitive in detection of small bleedings and small vascular malformations than conventional T2* imaging and that it is an imaging technique which is highly sensi-

tive to iron accumulation in the brain; this is observed in ageing process, reflection of brain damage, diseases of iron metabolism and haemorrhages. Iron involvement is already accepted in Hallervorden-Spatz disease, neuroferritinopathy, aceruloplasminemia, Friedrich's Ataxia. However, larger studies are still needed to determine the role of SWI in iron measuring especially in neurodegenerative diseases (Alzheimer's disease, Parkinson, ALS, and in Multiple Sclerosis).

References

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