

A Protean Poseur--SSPE

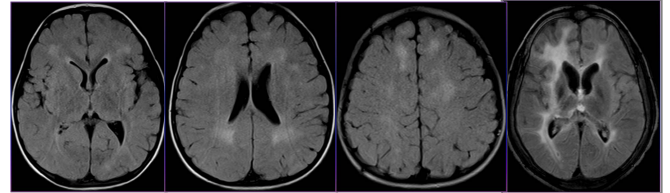
Sniya Valsa Sudhakar¹ and Maya Mary Thomas²

¹Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, India, ²Neurology, cmc vellroe, Vellore, Tamil Nadu, India

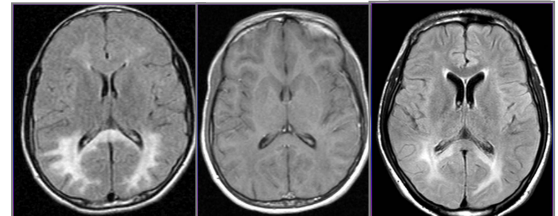
Purpose: Subacute sclerosing panencephalitis (SSPE) is a progressive, inflammatory neurodegenerative disease, a slow virus infection caused by the measles virus. Although fatal, early initiation of the treatment slows the progression and improves the patient's quality of life. The aim of this educational exhibit is to portray the protean MR imaging manifestations of SSPE

Outline of Content: This Educational Exhibit is based on data from a retrospective study of 90 cases of SSPE which was proven based on clinical, serological and EEG findings. Because of the varied spectrum of imaging findings and resemblance of imaging findings to multiple other conditions, the authors feel that awareness of different MRI appearances of SSPE would help institute early diagnosis and supportive treatment

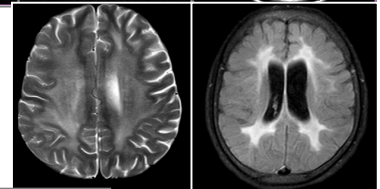
Classic MRI appearance of SSPE is asymmetrical subcortical and deep white matter involvement. The asymmetry helps in differentiation from leukodystrophies. Differentiation from vasculitic pathology associated with collagen vascular diseases can be made from absence of microbleeds and clinical present



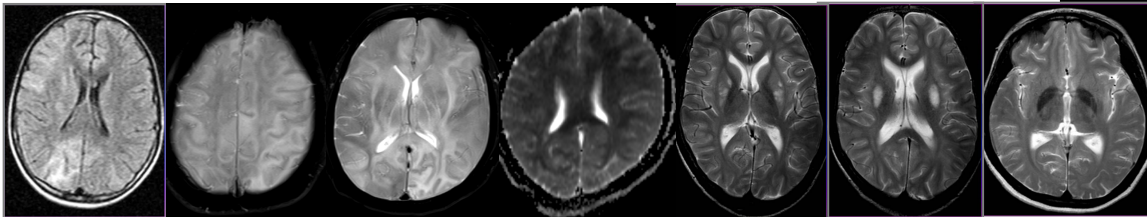
ALD like pattern with posterior periventricular and callosal involvement is another pattern. Absence of enhancement helps in differentiation



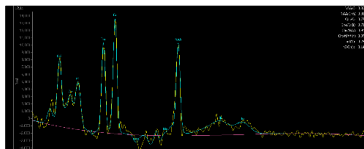
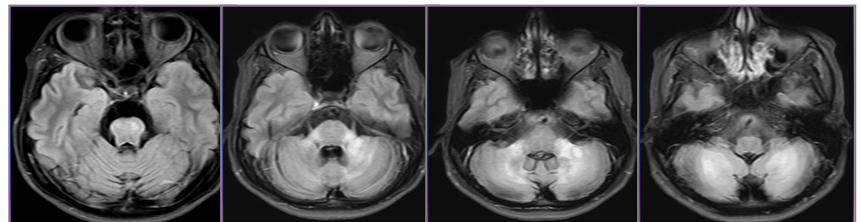
Symmetric periventricular pattern hyper intensity with butterfly like pattern can mimic MLD. Similar picture with restricted



SSPE can also present with grey matter changes in the form of extensive hyper intensity, restricted diffusion and can mimic MELAS, vasculitis, gliomatosis and other subacute encephalitis processes. Atrophic changes without significant signal abnormalities is another common presentation. Deep grey involvement mimicking Leighs disease and NBIA can also be seen



SSPE can uncommonly manifest with posterior fossa changes with cerebellar MCP and pontine changes



MR spectroscopy shows reduced NAA peak

Summary

To conclude, SSPE is a protean poseur with wide and varied MRI manifestations mimicking a host of other disease conditions. Awareness of the different MRI appearances and mimics can help in establishing early diagnosis and supportive treatment