

LCH Choroid Plexus

Joseph Junewick, MD FACR

03/09/2010

History

Child with Langerhans cell histiocytosis and new neurological symptoms.

Diagnosis

LCH Choroid Plexus

Discussion

The choroid plexus forms as a result of invagination of pia mater through the neural tube into the ventricular system, bringing along blood vessels and ependyma. The main role of the choroid is cerebrospinal fluid homeostasis. but it also plays an important role in extension of disease from the brain parenchyma and meninges.

The blood vessels of the choroid are fenestrated which allow free movement of many substances. Choroid plexitis may be related to tuberculosis, Cryptococcus, Cytomegalovirus, Nocardia, and Toxoplasmosis infections. Granulomatous diseases such as Langerhans cell histiocytosis can also be seen. Typically, the choroid plexus is enlarged with intense enhancement; occasionally there is ependymal enhancement and/or periventricular edema.

LCH is a disorder of immune dysfunction related to clonal proliferation of Langerhans cells. The typical patient is a young male caucasian although all ages, genders and races can be affected. Prognosis is related to the extent of systemic involvement. LCH can involve any organ.

Findings

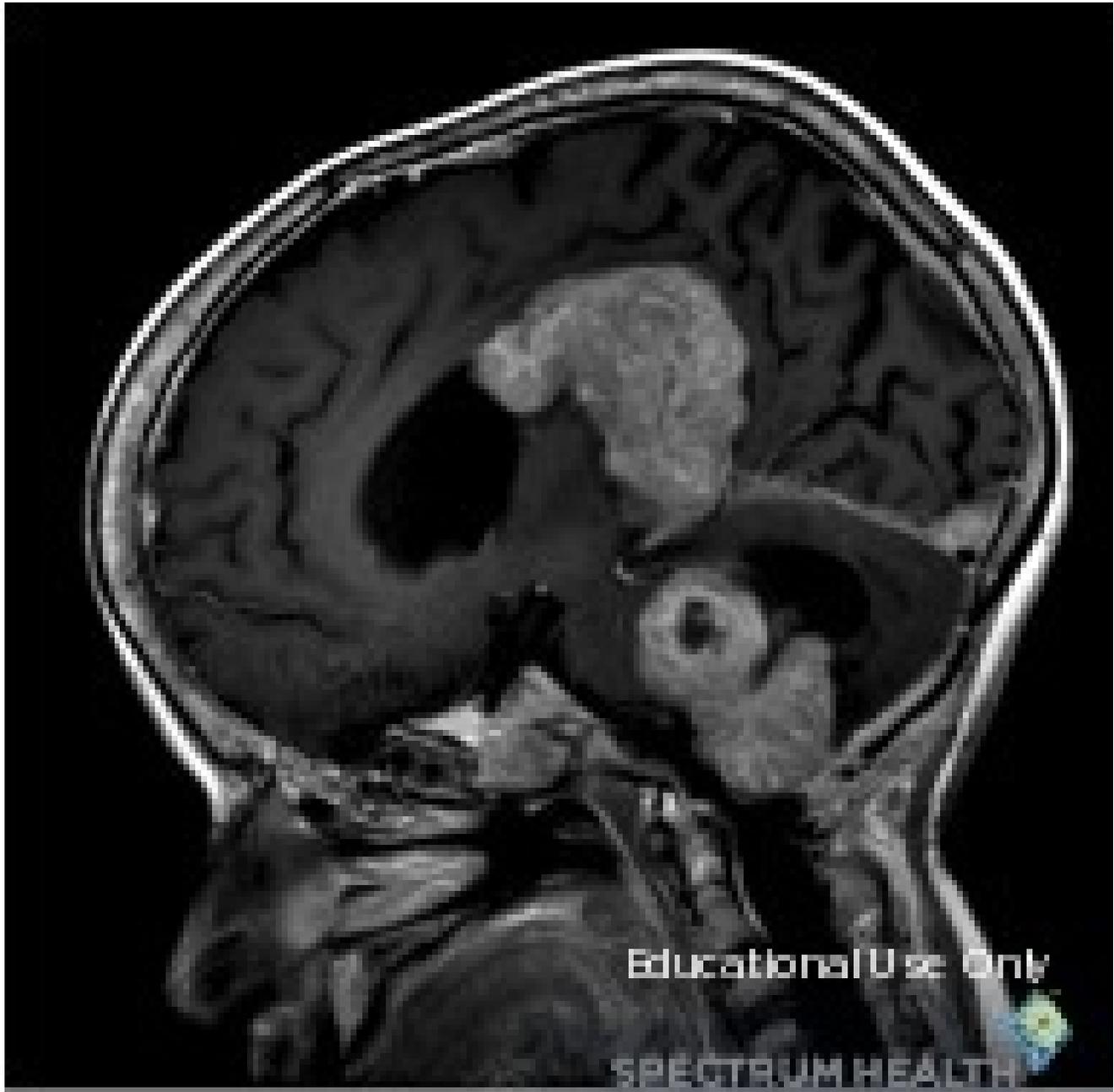
MR-Markedly enlarged choroid in the atria and 4th ventricle with T2 hypointensity and post-gadolinium T1 hyperintensity. Also note enhancing dural plaques.

Reference

Naeini RM, Yoo JH, Hunter JV. Spectrum of Choroid Plexus Lesions in Children. AJR (2009); 192:32-40.

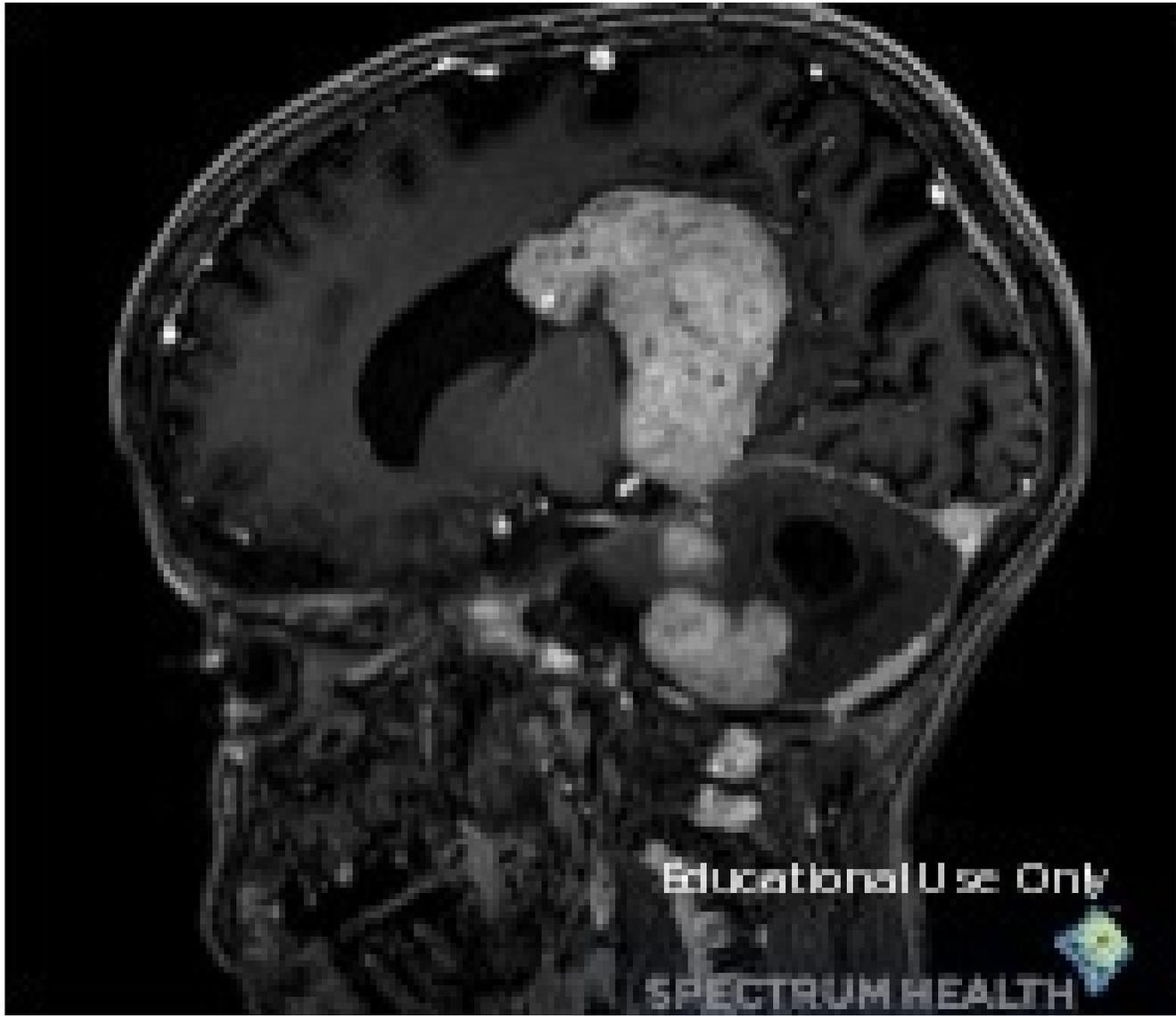
Contributor

WL Schey, MD



Educational Use Only

SPECTRUM HEALTH



Educational Use Only

SPECTRUM HEALTH





Educational Use Only

STANFORD HEALTH



Sponsored By



Disclaimer

This teaching site is partially funded by an educational grant from GE Healthcare and Advanced Radiology Services, PC. The material on this site is independently controlled by Advanced Radiology Services, PC, and GE Healthcare and Spectrum Health have no influence over the content of this site
Content Download Agreement

The cases and images on this website are owned by Spectrum Health. Permission is granted (for nonprofit educational purposes) to download and print materials to distribute for the purpose of facilitating the education of health professionals. The authors retain all rights to the material and users are requested to acknowledge the source of the material.

Site Disclaimer

This site is developed to reach healthcare professionals and medical students. Nothing this site should be considered medical advice.

Only your own doctor can help you make decisions about your medical care. If you have a specific medical question or are seeking medical care, please contact your physician.

The information in this website is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific medical condition.

The viewpoints expressed in these cases are those of the authors. They do not represent an endorsement. In no event will Advanced Radiology Associates, PC, Spectrum Health Hospitals (Helen DeVos Children's Hospital) or GE Healthcare be liable for any decision made or action taken in reliance upon the information provided through this website.