Cerebral Fat Embolism

Figure. Magnetic resonance imaging shows scattered, spotty high-intensity areas on T2-weighted images.

T he magnetic resonance imaging reported “increased densities in T2-weighted images in the corpus callosum and frontoparietal lobes, consistent with fat embolism” (Figure). The patient remained in a coma and on mechanical ventilation for 3 weeks. He woke up on day 25 and had a slow improvement of his mental status. He was discharged a few days later to a rehabilitation center.

Cerebral fat embolism may occur without any respiratory or other symptoms.1,2 The cerebral manifestations may include confusion, lethargy, convulsions and coma. The history of the fractures, unexplained cerebral manifestations, and unexplained anemia and thrombocytopenia should alert the clinician to the possibility of cerebral fat embolism. The brain CT scan is usually normal. The magnetic resonance imaging is diagnostic and shows scattered, spotty high-intensity areas on T2-weighted images involving the cerebral white matter, corpus callosum, and basal ganglia.3 The prognosis is usually good and most patients recover slowly.

Accepted for Publication: April 3, 2003.

Correspondence: Demetrios Demetriades, MD, Department of Surgery, Room 1105, LAC+USC Trauma Center, 1200 North State St, Los Angeles, CA 90033 (demetria@usc.edu).

REFERENCES

Submissions

The Editor welcomes contributions to the “Image of the Month.” Send manuscripts to Archives of Surgery, 1411 E 31st St, Oakland, CA 94602; (510) 437-4940; fax: (510) 534-5639; e-mail: archivesofsurgery@earthlink.net. Articles and photographs accepted will bear the contributor’s name. Manuscript criteria and information are per the “Instructions for Authors” for Archives of Surgery. No abstract is needed, and the manuscript should be no more than 3 typewritten pages. There should be a brief introduction, 1 multiple-choice question with 4 possible answers, and the main text. No more than 2 photographs should be submitted. There is no charge for reproduction and printing of color illustrations.