Delayed massive cerebral fat embolism secondary to severe polytrauma

Embolia grasa cerebral masiva tardía secundaria a politraumatismo grave

J. Romero-Imbroda a,∗, C. Martínez-Agudiez b, S. Villanueva-Serrano c

a Servicio de Neurología, Hospital Comarcal de Melilla, Melilla, Spain
b Servicio de Urgencias, Hospital Comarcal de Melilla, Melilla, Spain
c Servicio de Medicina Intensiva, Hospital Comarcal de Melilla, Melilla, Spain

Figure 1

Forty-four year-old-polytraumatized male due to car crash showing multiple lesions: splenic rupture, left hemopneumothorax, open fracture in his left elbow, and left scapular fracture. It was necessary to conduct one splenectomy procedure and the open reduction of the humeroulnar joint. The patient’s progression after these procedures was good.

Fifteen (15) days after hospital admission, the patient started experiencing seizures that required sedation and advanced life support for stabilization purposes. The CT scan of the patient’s brain showed multiple hypodense serpiginous images perpendicular to the cortex projected from the frontal and occipital horns of the lateral ventricles (Fig. 1A), and symmetrically damaging the frontal, parietal and occipital lobes (Fig. 1B). The result of the analysis of the level of radiodensity was −70 Hounsfield units, compatible with fat density. The diagnosis was massive cerebral fat embolism syndrome. The patient experienced brain swelling, then brain dead and eventually death.