Subdural empyema as a complication of odontogenic maxillary sinusitis

Empiema subdural secundario a sinusitis maxilar de origen odontógeno

Twenty-one-year-old male patient with right-sided hemi-crania continua headache, fever and purulent rhinorrhea presented with a diagnosis of right maxillary sinusitis that remains unresponsive to antibiotic therapy. The patient was re-evaluated more than 10 days after showing these symptoms, and one craniofacial TC scan with contrast was conducted that confirmed right pansinusial involvement and one extensive extra-axial subdural frontoparietal ipsilateral collection that was consistent with empyema (Fig. 1). Urgent neurosurgery was performed with evacuation of the subdural suppurated collection. After reviewing the CT scan, one round unilocular lesion was seen with well-established edges inside the right maxillary sinus and associated with piece 16 and consistent with a complex periapical cyst (Fig. 2A and B). After identifying the primary focus of infection, one exodontia procedure was performed resulting in abundant pus and curettage of the sinus with favorable clinical progression.
Figure 2  Craniofacial CT scan (coronal slice 2A and axial slice 2B). Invasion of right maxillary sinus including cystic lesion suggestive of periapical cyst (arrow). Ipsilateral frontal pneumocephalus.