The pathophysiology of emergence delirium (ED) remains a mystery. Using a case study approach, ED is discussed from a clinical perspective. The case is a 4-year-old male who had myringotomy tube placement while anesthetized with sevoflurane. The negative outcome for this child is presented. The epidemiology of the phenomena is reviewed and definitions are examined. Several methods to assess ED are presented, accompanied by a discussion of the development of assessment tools. Research findings are included that address the possible causes of ED including preoperative anxiety, rapid awakening, pain, and a predisposition for this phenomenon in certain children. Various interventions, both pharmacologic and nonpharmacologic are considered. The impact of anesthesia on pediatric brain development is discussed and finally some possible solutions are hypothesized.