To compare the prevalence rates of seizure, hydrocephalus and other clinical conditions before and after a surgical removal of subependymal giant cell astrocytoma (SEGA) surgery in patients with tuberous sclerosis complex (TSC) who had an initial SEGA surgery. A SEGA surgery was defined as having 1) a TSC diagnosis code, 2) a benign brain tumor diagnosis code, and 3) a surgical removal of SEGA. In this real-world claim database analysis, we observed that a portion of TSC patients experienced surgical complications within first year after their SEGA surgeries. Further research is needed to understand the causes of this surgical outcome.

PSU4 POSTOPERATIVE PREVAlENCE RATE OF SUBEPENDYMAl GIANT CELL ASTROCYTOMA (SEGA) DIAGNOSIS and REPEATED SEGA SURGERY IN PATIENTS WITH TUBEROUS SCLerosIS COMPLEX: A REAL-WORLd nATIONAL RETROSPECTIVE COHORT STUDY

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OBJECTIVES: To examine the prevalence of subependymal giant cell astrocytoma (SEGA) diagnosis and repeated SEGA surgeries among patients with tuberous sclerosis complex (TSC) who had an initial SEGA surgery. METHODS: Based on three US national health claims databases (2000–2009), we conducted a retrospective cohort study with TSC patients who had a first observed SEGA surgery at age 35 or younger and were under continuous health insurance coverage 1 year before and 1 year after the surgery were selected. The prevalence rates of surgical complications among the 1st postoperative year were 34% for surgical procedure complications, 17% for subdural empyemas, 12.8% for nervous system complication, 4% for postoperative infection, 2% for epidural abscess, and 9% for surgical misadventures respectively. CONCLUSIONS: In this real-world claim database analysis, we observed that a portion of TSC patients experienced surgical complications within first year after their SEGA surgeries. Further research is needed to understand the causes of this surgical outcome.