Corpus Callosotomy (CC) is a palliative procedure for patients with medically uncontrollable seizures not amenable to focal resection. CC is well accepted as a surgical option for atonic seizures commonly associated with Lennox Gastaut Syndrome. The utilization of CC has evolved from one of conventional palliative treatment to one of adjunctive therapy before further surgical resection and more importantly as a lateralizing tool in a select group of patients where presurgical evaluation has been non-localizing.

Our institution has performed sixty-four corpus callostomy (CC) procedures in the last twenty years.

Results:
- 37 were conventional palliative surgery for atonic seizures associated with Lennox Gastaut Syndrome. A reduction of greater or equal to 75 percent in atonic seizures occurred in 75 percent of patients in this cohort.
- 20 were nonconventional CC:
  - 7 with adjunctive CC at the time of a cortical resection
  - 13 with CC or nonlocalized intractable complex partial and/or generalized tonic clonic seizures. Not surprisingly, given the baseline refractory nature of this population, the outcome of this combined cohort remained poor at twelve months (Engel class III or IV).
- 7 underwent CC with the expectation of forced lateralization for focal resection.

Conclusions:
In the past, it was thought that an anterior two-third callosotomoy would prevent postoperative neurologic deficits such as the disconnection syndrome marked by mutism, hemiataxia, and/or alexia. However, our data suggests that younger patients can tolerate a one-step complete CC with little perioperative morbidity. In terms of seizure control, our experience and others indicate CC is preferable for atonic seizures (drop attacks) with results that are superior to those of partial sectioning.
Case:
Female patient was first seen at 2 years old when she presented with seizures. Patient experienced clusters of astatic drops with and without arm extension (EEG a) and frequent daily head drops, often 30-40 daily. Developmentally, she was not meeting her milestones, with significant speech and cognitive delay.

Patient remained intractable to multiple antiepileptic medications; including valproic acid, lamotrigine (LTG), levetiracetam (LEV), rufinamide and clobazam. MRI was normal. EEG revealed a multifocal interictal EEG and an ictal pattern of diffuse ictal spike followed by desynchronization.

Surgery:
Complete corpus callostomy at the age of 6.

Outcome:
Two years post operatively, patient is seizure free (EEG b) with antiepileptic therapy LTG and LEV. Patient is gaining developmental milestones with speech and cognition.