

frontotemporal epilepsies. Although considerable work has been done to establish the minimum necessary resection distance from these sites to preserve language, no previous work has shown how these representations are affected by proximal resections. **METHODS:** Between 1967 and 2005, 22 patients [seizure onset (y): 11.5 (0.2–33); age at initial resection (y): 27.7 (10–39); time between operations (y): 8.4 (1–20.3); sex: 14 females; hemisphere: 21 left] underwent repeated perisylvian resective epilepsy surgeries of the language-dominant hemisphere. Each set of operations comprised intraoperative language mapping and cortical photographs. Using this data, a Bayesian hierarchical model was used to estimate the variability of language localization pre-resection Versus post-resection. **RESULTS:** The statistical model shows the posterior median difference in cortical location of language sites pre-resection Versus post-resection is 0.6 cm, with a posterior 95% CI of 0.4 cm, 0.9 cm. **CONCLUSION:** This work suggests permanence in cortical language centers following resection of infringing cortex, while providing a reasonable statistical method to impute unobserved sites during the mappings, and confirming the validity of using proximity sites defined by shortest distance in the current literature.

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### Coping strategies used by caregivers of newly diagnosed pediatric brain tumor patients

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**OBJECTIVES/SPECIFIC AIMS:** The goal of this study is to use patient-centered qualitative techniques to determine what strategies caregivers use to cope with the stress of a child having recently (ie, within the past month) undergone surgical removal of a brain tumor. Results will eventually be evaluated and compared with results of quantitative measures of psychosocial risk and distress as well as demographic and medical characteristics. **METHODS/STUDY POPULATION:** All caregivers of patients with a newly diagnosed brain tumor requiring neurosurgery admitted to Children's of Alabama (with English or Spanish-speaking parents) are eligible for enrollment. Participants are enrolled during their child's initial hospitalization for surgical removal of a brain tumor. Approximately 1 month after hospital discharge, during a routine follow-up clinic visit, caregivers participate in a semistructured interview with a research assistant. Interview questions are used to obtain information about parent and family coping by asking first broadly about stress management over the previous month and then specifically about individual coping strategies. Semistructured interviews are audio recorded, transcribed, and coded for common themes. Interviews are coded by using specific words or phrases to describe various domains of the experience from the caregiver's perspective. Each participant is given a study ID and study IDs are logged with each code word or phrase endorsed during the interview. **RESULTS/ANTICIPATED RESULTS:** To date, 22 caregivers have been enrolled and 15 have completed interviews. The most common coping mechanisms fall into the domains of active, avoidance, emotion-focused, and spiritual coping. Active coping consists of information seeking (eg, taking notes, internet research, asking questions), openly communicating emotions, celebrating small victories (eg, focusing on a good scan or test result, thinking that the diagnosis or treatment could have been worse), planning (eg, focusing on 1 d at a time), and maintaining normalcy (eg, maintaining extracurricular activities, returning to school if possible, continuing to see family and friends). Avoidance coping consists of evading discussions about emotions, withdrawal from family members, denial (eg, keeping a cancer diagnosis from the child), and avoiding seeing people or participating in activities. Emotion-focused coping consists of crying, laughing, and staying strong in front of the patient. In general, those who self-identify as coping poorly tend to be those who utilized more avoidance-focused coping strategies. Further, caregivers tended to identify active coping strategies (eg, taking notes, focusing on 1 appointment or treatment at a time) as the most helpful. **DISCUSSION/SIGNIFICANCE OF IMPACT:** It will be helpful for providers to more deeply understand the experience of caregivers whose children have recently undergone brain tumor resection and the strategies used to cope with the stress of the first month postsurgery. This information can be used to create standardized interventions for use during posthospitalization clinic visits. For example, if families continue to endorse that active coping mechanisms are the most helpful, providers can assist caregivers in developing these strategies (eg, uniformly provide notebooks and encourage caregivers to keep track of questions and appointment information, pair caregivers who are struggling with others who use more active coping strategies). Those utilizing more avoidance coping strategies may need more coaching and recommendations. A brief assessment could potentially be developed for caregivers dealing with this diagnosis, in order to quickly assess coping strategies and provide appropriate recommendations. Future analyses will determine whether initial coping strategies and adjustment are predicted by child age or medical information.

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### Reperfusion strategies when non-stemi is misclassified as stemi myocardial infarction

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**OBJECTIVES/SPECIFIC AIMS:** A retrospective analysis was done at the Cardiovascular Center to evaluate reperfusion strategies, including stemi infarcts and non-stemi classified as stemi in a period of 2 years. **METHODS/STUDY POPULATION:** Review the records of stemi infarcts in a period of 2 years. **RESULTS/ANTICIPATED RESULTS:** In total, 101 cases were classified as stemi, but after strict analysis (time wise) 24 cases were non-stemi; 47% had inferior myocardial infarction and 38% an anterior myocardial infarction with a mean age of 65 years. All cases were immediately catheterized. Although the non-stemi, classified originally as stemi did not meet the time limit (<2 h) for cath. The stemi group (77 P.) 58 P. had angioplasty with stent implantation. 19 P. had an EF of 45% and remained that way during follow up. The rest of the P. the EF went up to 50% or more. The non-stemi group (24 P.) had angioplasty with stent implantation. The EF remained around 40% during follow up, which was the EF on admission. Fibrinolysis was given erratically. No changes were seen in the EF on follow up in the fibrinolytic group. **DISCUSSION/SIGNIFICANCE OF IMPACT:** This shows the importance of classifying the P. well between stemi and non-stemi. The time frame to catheterization should be kept as strict as possible, due to transmural infarcts, and catheterized in <2 hours to avoid deterioration of the left ventricular function and its consequences. This strict classification will save money to the institution when emergency catheterization is avoided in the non-stemi group.

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### Patient and household member colonization and environmental contamination with *Staphylococcus aureus* in a comparative effectiveness study of home-based interventions to reduce CA-MRSA recurrence and household transmission

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**OBJECTIVES/SPECIFIC AIMS:** Community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) skin and soft tissue infections (SSTIs) are commonly seen in primary care, with recurrence rates that range from 16% to 43%, and present significant challenges to clinicians, patients, and families. This comparative effectiveness research study aims to develop and evaluate a home-based intervention implemented by Community Health Workers (CHWs) or "promotoras" to prevent recurrence of CA-MRSA in patients presenting to primary care with SSTIs and transmission within their households. This presentation will examine associations between wound microbiology, clinical presentation, and housing characteristics, including housing density and household surfaces contamination. **METHODS/STUDY POPULATION:** In partnership with 3 Community Health Centers and 3 community hospitals in NYC, this study will recruit patients (n = 278) with confirmed MRSA SSTIs and their household members. Participants will be randomized to receive either a CHW/Promotora-delivered decolonization-decontamination intervention (based on the REDUCE MRSA trial) or usual care. The highly engaged stakeholder team finalized the intervention protocol, developed and implemented CHW and clinician training, and developed an online health portal application for data management and exchange. **RESULTS/ANTICIPATED RESULTS:** We have collected 923 isolates from 237 individuals, including 240 wound culture isolates and 683 surveillance culture isolates (nares, axilla, groin). MRSA and MSSA were found in 19% and 21.1% of wound cultures, respectively; 59.5% with MRSA + wound culture had 1 or more MRSA + surveillance culture; 67.8% with MSSA + wound culture had 1 or more MSSA + surveillance culture. Of those with MRSA or MSSA infections, 70% of subjects were male, with an average age of 37.9 (SD = 15.9 y). The most frequent sites of infection were the leg (20%), axilla (18%), buttock (17%), and abdomen/torso (12%). There was no association between the location and type of infection (MRSA/MSSA) (p-value = 0.09). The kitchen floor (14.05%) and bedroom floor (14%) were the most common surfaces contaminated with MRSA. These were also the most common surfaces contaminated with MSSA, which was recovered from 10.2% and 9.1% of kitchen floors and bedroom floors, respectively. For individuals with an MRSA or MSSA wound infection, there was an average number of 3.2 (SD = 1.6) co-residents per household, and 36.5% of household members were colonized with either MRSA or MSSA. There is no association between household density (number of co-residents)