Objective: The purpose of this study was to analyze the effects Hurricane Katrina had on the demographics and outcomes of patients receiving cochlear implantation at our institution.

Design: This was a retrospective chart review of 179 patients (190 ears) receiving cochlear implantation from January 2003 to December 2007.

Methods: Paper records and an outcome database were reviewed for analysis.

Results: The number of implants performed pre-Katrina (pre-K) was 68 (2.1 per month), post-Katrina (post-K) the number rose to 122 (4.3 per month). The percentage of patients paying primarily with public funds (Medicare, Medicaid) was 41.2% pre-K and increased to 55.7% post-K (p=0.067). Post operative pure tone averages were 24.3 (± 11.05) dB pre-K and 23.7 ± 11.93) dB post-K (p=0.7272). Finally the number of complications encountered pre-K was 10 (2 major and 8 minor). Post-K the total number of complications encountered was 9 (3 major and 6 minor). A major complication was defined as a serious infection or loss of implant.

Conclusions: Despite the damage and displacement Hurricane Katrina caused we saw an increase in the number of patients receiving cochlear implants. Our patient population’s payment means shifted toward a greater percentage utilizing public funds following the storm. We also saw an increase in the number of patients obtaining funding from public sources. This is again a sign of our changed referral base brought about by the disruptions of the storm. Finally, the outcomes we obtained after the storm were similar to those prior to the storm. It was thought that there might be a small increase in the number of complications such as infections, due to the difficulties that families were having in the region during this time, including attending follow-up appointments, but none was found. This is testimony to the perseverance of our patients and their families.

INTRODUCTION

On August 29th 2005 Hurricane Katrina made landfall in Louisiana causing billions of dollars of damage and upending untold numbers of lives. Countless people were forced to leave our region with their homes and workplaces destroyed, while other stayed behind trying rebuild. The gulf coast’s health care delivery system was not immune to the destruction and had a large number of its facilities damaged or destroyed, changing patterns of patient care throughout the region. Our institution was one of the first in the area to open following the storm and our cochlear implantation program quickly reorganized. We wished to analyze the effect the storm had on our patient population and outcomes during this difficult time, and compared it to that just prior to the storm.

METHODS AND MATERIALS

Paper records and a previously created outcome database were reviewed to compile data on an excel spreadsheet for analysis. Chi-square tests were used to evaluate for differences between categorical variables and t-tests were used to evaluate for differences between continuous variables.

RESULTS

Number of ears Implanted

Complications

Patient Characteristics

Post operative Pure Tone Averages

CONCLUSIONS

Despite the damage and displacement Hurricane Katrina caused to our region we saw an increase in the number of patients receiving cochlear implants following the storm. Our patient population’s payment means shifted following the storm toward a greater percentage utilizing public funds. We saw no change in our hearing outcomes as evidenced by PTA. Finally, we saw a relative decrease in the number of complications following surgery after Hurricane Katrina.

REFERENCES