# EVALUATING THE ONLINE TOOL TO DETERMINE APPROPRIATENESS FOR AN EPILEPSY SURGERY EVALUATION

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## INTRODUCTION

• Many patients with pharmacological resistant epilepsy could benefit from epilepsy surgery. However, there is a significant delay of assist physicians in identifying patients with refractory epilepsy who might benefit from an epilepsy surgery evaluation.

• Considering this, Jette et al. developed and implemented an online tool to determine appropriateness for epilepsy surgery evaluation (Neurology® 2012;79:1084–1093). This tool still needs validation in different scenarios.

# METHODS

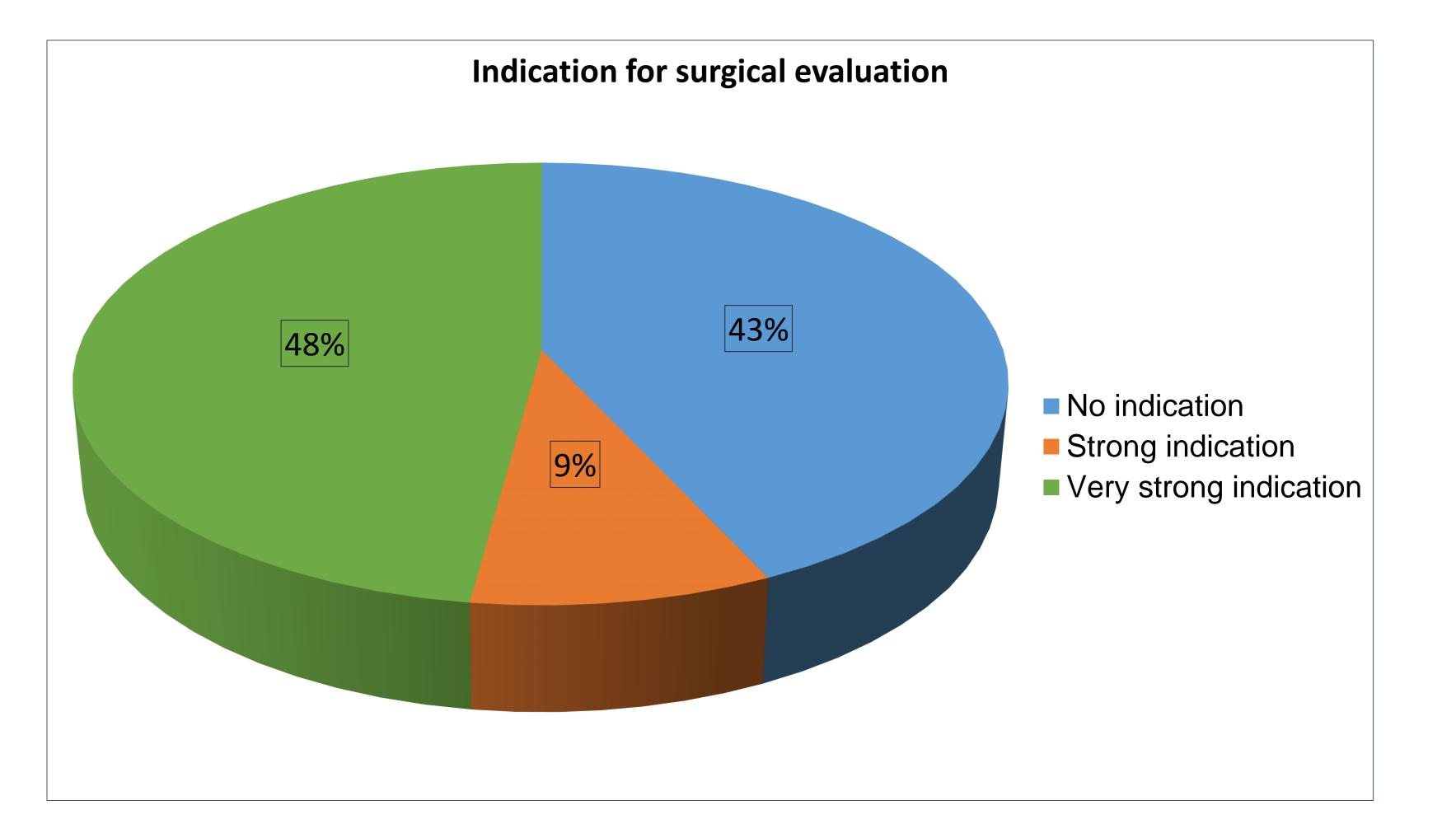
- We evaluate this online tool to determine appropriateness of epilepsy surgery evaluation in our epilepsy program.
- This work was conducted at outpatient epilepsy clinic of Hospital de Clinicas de Porto Alegre (HCPA), Brazil.

• We used the Online Tool to Determine Appropriateness for an Epilepsy Surgery Evaluation in a cohort of 211 patients with focal epilepsy,

selected from our epilepsy outpatient clinic in order to examine its use in our scenario.

# RESULTS

We included 211 patients, 103 (48.8%) women and 108 (51.2%) men, with mean age of 41,3  $\pm$ 15,8. Two hundred patients (94.8%) presented focal seizures with impaired consciousness. One hundred and fifty nine (75.4%) patients were using two or more antiepileptic drugs. One hundred eighty five (87.7%) patient showed abnormal electroencephalography (EEG) and 125 (59.2%) showed abnormal neuroimaging with focal lesions. All patients included in this study were in our program for one year or longer.



Using the online classification tool, 91 (43.1%) patients were classified as patients that were not in need to be referred for epilepsy surgery evaluation, 19 (9%) patients should be considered for an epilepsy surgery evaluation and 101 (47.9%) patients had clear indication for surgical evaluation. When evaluated together, the most important variable for indicating a patient for epilepsy surgery evaluation was pharmacological refractoriness.

# CONCLUSION

According to existing medical literature, 1/3 of patients with epilepsy show poor response to pharmacological treatment with antiepileptic drugs. These patients need to be promptly identified, and programs to grant access to these patients to epilepsy surgery need to be improved.
Jette online tool is useful for referring patients for epilepsy surgery evaluation. The program adequately selected those patients that showed pharmacological refractoriness to antiepileptic drugs.

• We believe that the use of this methodology will optimize epilepsy surgery referral and could eventually be used at a national level to improve public healthcare and to offer better treatment for this group of patients.