Epilepsy Surgery Physician Questionnaire

Surgical treatment options for patients with epilepsy include: anterior temporal lobectomy, focal cortical resection, lesionectomy, corpus callosotomy, vagal nerve stimulation, functional hemispherectomy, subpial transection, and electrical stimulation.

1. Do you see any patients with seizures/epilepsy?
   - ☐ Yes → If yes, please answer the questions below.
   - ☐ No → If no, thank you for your participation. This survey is now complete.

2. What is your area of clinical practice? (*check all that apply*)
   - ☐ General neurology
   - ☐ Subspecialty neurology (*please specify*)_____
   - ☐ Other _____

3. For how many years have you been a practicing neurologist?[1]
   _____

4. Are you affiliated with a tertiary care academic institution (ie: university)?
   - ☐ No
   - ☐ Yes

5. Is there an epilepsy program in your city?
   - ☐ No
   - ☐ Yes

6. Do you have access to the adequate expertise, technology and resources to allow for appropriate selection of epilepsy surgical candidates?
   - ☐ Yes
   - ☐ No → If no, please specify why not_____
     _____

7. Which patients do you see in your practice?[2]
   - ☐ Adult
   - ☐ Pediatric
   - ☐ Both adult and pediatric

8. Approximately how many patients with epilepsy do you treat each month?[3]
   - ☐ <5
   - ☐ 5 – 19
   - ☐ 20 – 40
   - ☐ >40

[1] Kumlien E, Mattsson P. Attitudes towards epilepsy surgery: A nationwide survey among Swedish neurologists. Seizure 2010;19(4):253-5.
[2] Erba G et al. Barriers toward epilepsy surgery. A survey among practicing neurologists. Epilepsia 2011;53(1):35-43.
[3] Hakimi et al. A survey of neurologists' views on epilepsy surgery and medically refractory epilepsy. Epilepsy & Behavior 2008;13(1):96-101.

9. In your opinion, how safe is epilepsy surgery <u>in carefully selected patients</u>?[4]
   - ☐ Very dangerous
   - ☐ Moderately dangerous
   - ☐ Neither dangerous nor safe
   - ☐ Moderately safe
   - ☐ Very safe

10. How many patients do you estimate you have referred either directly to a neurosurgeon or to an epilepsy program assuming that an epilepsy surgery work-up would be completed if appropriate?

In the past year?	**In the past five years?**
☐ 0	☐ 0
☐ 1-2	☐ 1-2
☐ 3-10	☐ 3-10
☐ 11-20	☐ 11-20
☐ 21-50	☐ 21-50
☐ >50	☐ >50

11. I am quite knowledgeable about the indications for epilepsy surgery.
   - ☐ Strongly agree
   - ☐ Somewhat agree
   - ☐ Neither agree nor disagree
   - ☐ Somewhat disagree
   - ☐ Strongly disagree

12. Are you familiar with the overall content of the American Academy of Neurology clinical practice guidelines on temporal lobe and localized neocortical resections for epilepsy? (NEUROLOGY 2003; 60: 538-547)[5]
   - ☐ Yes
   - ☐ No

13. Is there a generally agreed upon definition for drug resistant epilepsy?
   - ☐ Yes
   - ☐ No
   - ☐ I don't know

14. How many adequately used AEDs does a patient with epilepsy need to fail to be considered drug resistant?[6]
   - ☐ Failure of seizure control after 1 AED
   - ☐ Failure of seizure control after 2 AEDs (monotherapy or polytherapy)
   - ☐ Failure of seizure control after ≥3 AEDs (monotherapy or polytherapy)
   - ☐ Failure of all approved AEDs
   - ☐ Other: please specify _____

[4] Prus and Grant. Patient beliefs about epilepsy and brain surgery in a multicultural urban population. Epilepsy & Behavior 2009;17(1):46-9.

[5] Engel et al. Practice parameter: temporal lobe and localized neocortical resections for epilepsy: report of the Quality Standards Subcommittee of the American Academy of Neurology, in association with the American Epilepsy Society and the American Association of Neurological Surgeons. Neurology 2003;60(4):538-47.

[6] Kwan et al. Definition of drug resistant epilepsy: Consensus proposal by the ad hoc Task Force of the ILAE Commission on Therapeutic Strategies. Epilepsia 2010; 51(6): 1069-1077.

15. In general, how many AEDs would you try (assuming an adequate trial at an adequate dose) before referring a patient who is still drug resistant for consideration of epilepsy surgery? ____

16. How long does a patient have to be drug resistant before you consider referring to be evaluated for epilepsy surgery? [7]
    - ☐ As early as possible
    - ☐ 1 year
    - ☐ 1 – 2 years
    - ☐ 3 – 5 years
    - ☐ 5 + years
    - ☐ No one should be referred for epilepsy surgery

17. Assuming an adequate trial of AEDs, how often do seizures need to happen for a patient with epilepsy to be a surgical candidate? At least… [8]
    - ☐ Yearly
    - ☐ Every 6 months
    - ☐ Every 3 months
    - ☐ Monthly
    - ☐ Weekly or more frequent
    - ☐ Anyone that is not seizure-free should be referred
    - ☐ No one should be referred for epilepsy surgery

18. Epilepsy surgery should be viewed as a last resort for patients with epilepsy.
    - ☐ Strongly agree
    - ☐ Somewhat agree
    - ☐ Neither agree nor disagree
    - ☐ Somewhat disagree
    - ☐ Strongly disagree

19. Patients with focal epilepsy and a normal MRI may benefit from epilepsy surgery.[9]
    - ☐ Strongly agree
    - ☐ Somewhat agree
    - ☐ Neither agree nor disagree
    - ☐ Somewhat disagree
    - ☐ Strongly disagree

20. Patients with generalized (non focal) epilepsies cannot be candidates for epilepsy surgery.
    - ☐ Strongly agree
    - ☐ Somewhat agree
    - ☐ Neither agree nor disagree
    - ☐ Somewhat disagree
    - ☐ Strongly disagree

[7] Erba G et al. Barriers toward epilepsy surgery. A survey among practicing neurologists. Epilepsia 2011;53(1):35-43.

[8] Hakimi et al. A survey of neurologists' views on epilepsy surgery and medically refractory epilepsy. Epilepsy & Behavior 2008;13(1):96-101.

[9] Engel et al. Practice parameter: temporal lobe and localized neocortical resections for epilepsy: report of the Quality Standards Subcommittee of the American Academy of Neurology, in association with the American Epilepsy Society and the American Association of Neurological Surgeons. Neurology 2003;60(4):538-47.

21. People with developmental delay cannot be candidates for epilepsy surgery.
    - ☐ Strongly agree
    - ☐ Somewhat agree
    - ☐ Neither agree nor disagree
    - ☐ Somewhat disagree
    - ☐ Strongly disagree

22. People with psychiatric comorbidities can be candidates for epilepsy surgery.
    - ☐ Strongly agree
    - ☐ Somewhat agree
    - ☐ Neither agree nor disagree
    - ☐ Somewhat disagree
    - ☐ Strongly disagree

23. Patients with epileptic encephalopathies cannot be candidates for epilepsy surgery.
    - ☐ Strongly agree
    - ☐ Somewhat agree
    - ☐ Neither agree nor disagree
    - ☐ Somewhat disagree
    - ☐ Strongly disagree

24. Approximately what percentage of patients experience clinically significant (i.e. disabling) and permanent adverse effects after anterior temporal lobectomy?[10,11]
    - ☐ <5%
    - ☐ 5-10%
    - ☐ 10-50%
    - ☐ > 50%

25. Aside from the very rare occurrence of a surgical death, which **one** side effect of anterior temporal lobectomy are you most concerned about when counseling your patients about surgical risks (<u>assume a dominant hemisphere resection</u>)?
    - ☐ Aphasia
    - ☐ Visual field loss
    - ☐ Paralysis
    - ☐ Memory loss
    - ☐ Other _____

26. What is the **ONE** biggest barrier your epilepsy patients face in accessing epilepsy surgery?

    _____

27. What is the approximate waiting time to be seen by an epilepsy specialist in your centre or in your area?

[10] Wiebe, S et al. A randomized, controlled trial of surgery for temporal-lobe epilepsy. NEJM 2001; 345 (5): 311-318.
[11] Engel et al. Practice parameter: temporal lobe and localized neocortical resections for epilepsy: report of the Quality Standards Subcommittee of the American Academy of Neurology, in association with the American Epilepsy Society and the American Association of Neurological Surgeons. Neurology 2003;60(4):538-47.

_____

28. What is the approximate waiting time for an epilepsy surgical evaluation (ie: seizure monitoring unit, neuropsychology) for patients in your centre?

    _____

29. Please use the space below to add any additional thoughts or comments you have regarding referral for epilepsy surgery. Feel free to use the back of this page also if necessary.

    _____

    _____

    _____

We *sincerely* thank you for your participation.

Study ID: ____