
Identification of Candidates

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1. TEMPORAL SEIZURE SEMIOLOGY

Presentation of J-M. Saint-Hilaire and M.A. Lee

Discussion of this presentation underlined some of the problems in determining the localizing value of individual symptoms and signs either present or absent. The need for and possibility of collaborative multi-institutional research was emphasized. The problems in interpreting subjective phenomena from history or from video monitoring evaluations were emphasized.

Individual comments were made about a number of the subjective experiences. A number of comments were made that the midline sensations reported in the history including epigastric or “rising sensation”, and “cephalic sensation” were indeed often ill-defined. It was emphasized that though these are the most common auras reported in temporal lobe epilepsy, they were not completely specific, occurring also in documented frontal lobe epilepsy.

Gustatory and olfactory hallucinations were felt to be rare but usually indicative of mesial temporal or insular origin. Their association with neoplasms was also mentioned.

Some controversy persists about the subjective phenomena referred to as “*deja vu*” as regards its possible lateralization to the non-dominant temporal lobe. Its value as a lateralizing sign was not universally agreed upon.

The difficulties of eliciting a warning when present were enlarged upon in a number of comments. The importance of appropriately worded open ended questions was emphasized. The interview technique attributed to Dr. T. Rasmussen for patients who initially said they had no warning was reiterated. His question would be “Do you ever think you’re going to have a seizure and you don’t have it?” If the patient said yes, the follow-up question would be “Well, what’s that like?”, and “Is that your warning?”.

The seizure may erase memory of a warning. Observers and video monitoring have identified evidences of such.

The signs associated with temporal lobe seizures, especially the lateralized dystonic posturing and postictal dysphasia for dominant temporal lobe seizures and verbal automatisms for non-dominant temporal lobe seizures were considered as reliable lateralizing features.

Clinically, rapid seizure spread was felt to be a factor correlating with poor prognosis. Other possible correlates were neocortical origin for slow seizure spread.

The discussion reinforced the contents of the presented paper of Drs. J-M. St.-Hilaire and M.A. Lee, stressing the importance of the first symptom, very careful history and observation of seizures and synthesis of the clinical information to form the

most useful hypothesis for localization and lateralization of the epilepsy.

2. EPIDEMIOLOGY OF TEMPORAL LOBE EPILEPSY

Dr. S. Wiebe, Presenter

Discussion dealt with the issues of classification systems used for study versus clinical data of a less differentiated nature. The possibility of using large data bases which were not reliant on sophisticated or controversial classifications as a means to further research was noted. The possibility of standardizing definitions and operative procedures for outcome analyses was emphasized.

Questions were raised concerning the existing estimates of prevalence for epilepsy amenable to surgical treatment in Canada. Since far fewer patients are being operated on per year than would be expected given the estimates, the question was raised if the estimates were correct or the patients were not receiving the type of care which would bring them forward for surgical intervention. Dr. Wiebe felt that the estimates were likely reasonably accurate and that the probability was that the relatively low numbers of patients reaching the tertiary care epilepsy units was related to deficiencies in knowledge dissemination.

The importance of establishing a linkage between the epilepsy clinics across the country for clinical and research purposes was emphasized by a number of discussants.

3. DEFINITION OF CANDIDACY

Presenters: M.W. Jones and F. Andermann (adults), W.T. Blume and P.A. Hwang (children)

Aspects of candidacy in adults which were discussed included age. No definite statement was made but some concern was raised about postoperative psychological and emotional impacts on older patients even though their seizure outcome may be excellent. The question was raised of how removal of mesial temporal lobe structures, important in memory, affects elderly patients. There is apparently no major source of data on this. Dr. Jones-Gotman commented on very late follow-up of anterior temporal lobe resection patients at the Montreal Neurological Institute and felt that there were significant numbers of patients with memory deficits. She felt that these were often the result of additive deficits with age-related losses plus temporal damage or removal. The problem of accelerated memory loss in temporal lobe epilepsy patients and its interaction with age-related loss and surgery was noted as a topic for further research.

The importance of neuroimaging, particularly modern MRI, in determining candidacy for epilepsy surgery was highlighted by a number of discussants. Use of MRI in paediatric epilepsy, particularly congenital lesions such as cortical dysplasias, was reviewed. It was felt that even with MRI, only part of the total area of abnormal cortex was identified as such and restricted removals for this reason would sometimes have limited success. This was referred to as “the tip of the iceberg phenomena” by Dr. Hwang.

The medical intractability criteria for inclusion in the surgical epilepsy series was discussed from a number of points of view. Whether patients with a known structural lesion and only a few seizures should be included in surgical series was questioned and the “two year criteria” for intractability was questioned. Most

comments stated that epilepsy associated structural lesions had a very high incidence of intractability and that prolonged delays were not warranted. A particularly strong statement was made by Dr. P. Hwang, “The treatment of choice, for a temporal lobe lesion that is producing seizures unquestionably in dispensable cortex, should be surgical in childhood. Only if surgery is not an option then one should pursue treatment with anti-convulsant drugs.” The importance of the patient’s quality of life and views of the risk benefits of surgical versus medical intervention in the decision as regarding candidacy were emphasized. The importance of early identification of patients with temporal lobe epilepsy, and proceeding with their drug trials efficaciously to determine medical intractability, and proceeding to their early evaluation for candidacy for surgical treatment was emphasized.