

recorded on the computer's digital disc which will write out the information on request.

Results

Using the 16-channel system Dr. Gloor's team has found that in epileptic patients in whom the standard EEG has failed to give unequivocal localizing evidence, it is now possible to pinpoint a specific region (usually the left or right temporal lobe) as the site of origin of the patient's seizures. If the information is truly consistent and the trouble spot is not too close to critical regions of the brain (like the speech cortex) the chances are very high that surgical removal of that part of the brain will bring total relief to the patient.

Dr. Gloor's team has been using the 16-channel system for only a few months. Demands on it are great and computer time is fairly scarce. Another method — an eight-channel system which transmits the electrical signals of the brain by radio waves — which the same doctors have used for some time has in many respects been superseded by the 16-channel system. The older method is nevertheless useful for recording the frequency of seizures and the type of activity or environment most conducive to epilepsy in the type of patient who suffers from "petit mal" or "absence" seizures. It cannot, however, provide the detailed information about different regions of the brain required to localize seizure activity.

Tape recorder system

The most recent telemetry system devised by the group is a very small portable cassette tape recorder, the original version of which was developed in a British medical research engineering laboratory to record ENG (electrocardiogram). Mr. Ives recognized its potential for recording EEG in epileptic patients and adapted it for use in the MNI. The recorder, which has four channels, uses regular commercial cassette tapes. The speed is very precisely regulated and it can run continuously for 24 hours. Batteries have to be changed every other day. Surface electrodes are glued on the patient's head and wires, coloured for camouflage, run through the patient's hair and down his back to connect to the recorder, which weighs only 400 grams (about 1 lb.) and is worn over

the shoulder. The great advantage of this system is that patients can use the recorder in their home or on the job. It is particularly suitable for patients to record the frequency of their seizures and also to establish whether, in certain cases of dizziness and black-out "spells", the problem is genuinely of an epileptic nature. To facilitate the location of a seizure on the tape when it is played back the patient is asked to turn off the recorder for one minute after he recovers from a spell. The doctors can then easily locate the straight line on all four channels indicating when the recorder was turned off and then replay the recording prior to this to see where the seizure occurred.

The systems developed by Dr. Gloor's team have changed the lives of many patients. In some cases they have been able to establish that patients who feared they had epilepsy did not in fact suffer from it; in others they have been able to improve drug therapy with the information obtained, and for those sufferers from severe epileptic attacks they have been able to provide neurosurgeons and neurologists with crucial information which, in many cases, has provided a complete cure.

Settlement services for immigrants

"Many organizations providing settlement services to immigrants under federal grants slated to terminate before the end of September will be able to continue under a new Settlement Services Contract System," Manpower and Immigration Minister Andras announced recently.

The Department of Manpower and Immigration and officials concerned with multiculturalism are reviewing 51 projects that provided various settlement services formerly funded by the Secretary of State multicultural program. Some of these originated as local initiatives projects.

To qualify for a Settlement Services Contract, groups must provide direct services to immigrants for their settlement and adjustment into the community. Groups to be considered include non-profit organizations that provide for orientation, reception, counselling, placement and settlement of immigrants.

The assistance already available at Canada Manpower and Immigration

Centres will continue. This includes emergency financial aid pending first employment, job counselling and placement and occupational language training. The Department is also increasing its efforts to ensure that individual immigrants receive the services they require for successful settlement.

More fresh air

Some of the major airlines servicing Canada and abroad have increased non-smoking areas on their aircraft.

Air Canada, one of the first to provide specific areas for non-smokers, back in September 1971, will designate second and fourth cabins of all wide-body jetliners as non-smoking areas. Approximately 40 per cent of all "jumbo" planes and 50 per cent of all DC-8s and DC-9s will be smoke-free.

Canadian Opera Company's twenty-sixth season

John Arab and Gwenlynn Little in Ravel's L'Heure espagnole, one of the productions of the Canadian Opera Company at the O'Keefe Centre, Toronto (September 6 to October 12). The Company, now in its twenty-sixth season, also includes in its repertoire Bluebeard's Castle (Bartok); The Flying Dutchman (Wagner); Carmen (Bizet); La Traviata (Verdi); Boris Godunov (Mussorgsky); and Faust (Gounod).

