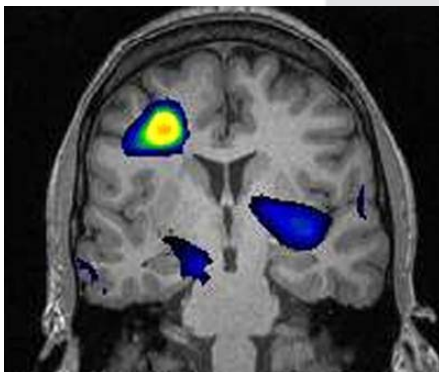


AUTOMATIC INJECTION OF A RADIOACTIVE DOSAGE FOR ICTAL SPECT

A research group, with wide experience related to epilepsy has developed a medical device for a quick automatic radioactive isotope injection to improve the identification of the epileptogenic focus

BACKGROUND

Epilepsy is one of the most frequent neurological diseases, characterized by recurrent seizures. Epilepsy treatment for drug resistant patients consists of the surgical extirpation of the epileptogenic focus, previously identified by SPECT. Ictal SPECT is defined as a radioactive tracer injection during epileptic crises that generates an image of cerebral blood perfusion and helps to identify the epileptogenic focus. However, nowadays up to 30-40% of ictal SPECT do not localize it.



Ictal SPECT

Taking into account that the time that happens from the beginning of the seizure until the tracer injection is crucial for the identification of the focus, the main limitation is that the current infrastructure for radioactive tracer is manual and slow.

TECHNOLOGY DESCRIPTION

The technology is a device for a quick automatic radioactive isotope injection that can be activated when the patient initiates an epileptic crisis.

ADVANTAGES

- Totally automated system.
- Reduction of injection time.
- A more precise adjustment of the radioactive dosage.
- Patients and nurses will have less risk of irradiation and contamination.
- It facilitates the work to the sanitary staff.

CURRENT STAGE OF DEVELOPMENT

Positives results have been obtained using an experimental prototype in 15 patients.

GOAL

We are searching companies interested in the co-development of this technology.

CONTACT

Albert Zamora
Fundació Clínic
Tel. + 34 (93) 2275400 (ext. 4001)
azamora@clinic.ub.es