Visualase system, stereotactic laser for minimally invasive neurosurgery



This is an advanced technology technique, with which laser ablation (thermal ablation) is performed and neurological diseases are treated, such as drug-resistant epilepsy, special types of tumors, metastatic brain tumors, as well as tumors that have relapsed after radiation therapy.

The indications are constantly expanding to include other conditions, which is to be expected since it is a new method that opens new horizons in the surgical treatment of neurological diseases. For example, it started being used instead of RF ablation for movement disorders.

The method initially involves placing a catheter based on the pre-operative magnetic resonance imaging and planning its course, through a small hole we create in the skull with a special drill, in the operating room under general anesthesia. Then the patient is transferred to the MRI scanner and this is where the actual operation begins.

Essentially, with the use of the laser, the brain structure that is our target (tumor, epileptic focus) is cauterized by controlling in real time the damage we cause with special software. This ensures both the accuracy and performance of the technique.

Among the other advantages of the technique are the quick and immediate mobilization of the patient and the exit from the clinic usually after two days.