

Psychosurgery: the search for an ethical equilibrium

Requested by the Congress of the US, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research defined in 1977, psychosurgery as the 'implantation of electrodes, destruction or direct stimulation of the brain by any means', aiming primarily at 'controlling, changing or affecting any emotional or behavioral disturbance'.¹ This definition still prevails in the US.

Based on the available literature, we deem correct to consider that the current status of psychosurgery is clearly ambiguous: it is a therapeutic resource and an experimental procedure. However, all debates on the ethical dimension of this question cannot ignore the evident difference between psychosurgery in the period of Egas Muniz pre-frontal leucotomy, afterward modified and divulged by Walter Freeman, and the current psychosurgery techniques, based on neuromodulation procedures. Nowadays the clinical investigations are based on much better known pathophysiogenic principles of the neural systems underlying physiopathogenic principles. They also count on detailed anatomic and electrophysiological studies and comprehensive resources of structural and functional neuroimaging.

Joseph Fins highlights that the mentioned definition excludes the neurosurgical treatment of pathologies such as Parkinson disease, epilepsy, and chronic pain. This exclusion would illustrate a Cartesian dualism distinguishing intrusive procedures aiming at the improvement of movement disturbances from those dedicated to treat psychiatric disorders.² According to him, such a separation would not be justified as the borders between neurology and psychiatry are increasingly fading away. For example, the mechanisms of Parkinson disease would be comparable to that of severe obsessive-compulsive disorder (OCD). Both would be characterized by a hypersynchronic activity and their pathophysiology and neural circuits in both cases would share corticobasal gangliothalamic interactions. Moreover, the treatment of Parkinson disease with deep brain stimulation can alter the mood and induce a reversible, although acute, depression.

Besides the background of its first times, the ethical debate concerning psychosurgery develops currently in a much more demanding context regarding the patients' rights. Taking that into account, Fins claims that society should protect itself from the risk of therapeutical adventures, but the groundless fear of the new neuromodulation techniques can lead to an excessive caution. An ethics in which prevails the risk aversion can lead

to a distorted protective position, and consequently to the restriction of potentially beneficial advances for the same population that the regulation tries to protect. A refinement in the 'informed consent doctrine', with patients assuming a more egalitarian role regarding their treatment as compared to the physicians', could help to correct this distortion.³ It would allow, perhaps, to reach the right point between the risk of side-effects and the access to technologically advanced therapies.

Furthermore, therapeutical protocols should assure that, before the indication of a surgical procedure, all non-intrusive treatments pertinent to the disease were provenly tried.

The position of the Brazilian Federal Council of Medicine

The medical precepts for the performing of psychosurgery that have to be complied by Brazilian physicians are found in two Resolutions of the Federal Council of Medicine (CFM). They are the Resolutions 1407 and 1408, both from 06/08/94.

The first one adopted the rules of the United Nations, of 12/17/91, contained in the 'Principles for the protection of persons with mental illness and for the improvement of mental health care'. They are 25 Principles, most of them with paragraphs. Psychosurgery is mentioned in Principle 11, which deals with informed consent. It is established that 'no treatment shall be given to a patient without his or her consent'. 'Patient' means a person receiving mental health care.

Informed consent is defined (Paragraph 2) as the 'consent obtained freely, without threats or improper inducements, after appropriate disclosure to the patient of adequate and understandable information in a form and language understood by the patient'. The patient should be explained about the: (a) diagnostic assessment; (b) purpose, method, likely duration and expected benefit from the proposed treatment; (c) alternative ways of treatment, including those least intrusive; and (d) possible pain or discomfort, risks and side-effects of the proposed treatment.

Regarding clinical trials and experimental treatments (Paragraph 15), they should never be carried out without the informed consent. In case the patient is unable to give the informed consent, the clinical trial or experimental treatment should only be applied with the approval of a competent and independent review body, specifically constituted for this purpose.

As to psychosurgery and 'other intrusive and irreversible treatments' for mental disorders (Paragraph 14) they only should

be performed when: (1) the patient has given his informed consent and (2) an independent external body has satisfied itself that there is genuine informed consent and that the treatment best serves the health needs of the patient. Besides, psychosurgery 'shall never be carried out on a patient who is an involuntary patient in a mental health facility'.

Therefore, there are higher requisitions for psychosurgery than for experimental treatment. In it, the patient's consent cannot be replaced by the approval of a review body, as provided for experimental treatment and clinical trial.

With regard to the Resolution 1408 it has specifications for these Principles. It establishes that experimental treatments, clinical trials or researches with patients unable to give their informed consent shall only be performed 'with the approval of a competent and independent review body assigned by the ethical committee of the facility and specifically constituted for this objective'.

On the other hand, the psychosurgery should only be performed if the patient him/herself gives his or her informed consent. Besides, it is established that 'an external body of professionals, requested to the Regional Council of Medicine (CRM)',

be convinced that 'there was a genuine informed consent and that the treatment best serves the health needs of the patient'.

Again, here the requisitions are higher. The patient's consent cannot be replaced by the approval of a review body. And this review body, rather than originated from the facility that performs the procedure, should be designated by CRM.

Summing up, the care and procedures preconised by CFM should be complied with to assure the protection of patients potentially who are candidates for surgical procedures.

Luiz Carlos Aiex Alves

Regional Council of Medicine of the state of São Paulo
(CREMESP)

Luiz Alberto Bacheschi

Medical School, University of São Paulo
Brazilian Academy of Neurology

Regional Council of Medicine of the state of São Paulo
(CREMESP)

José Manoel Bombarda

Regional Council of Medicine of the state of São Paulo
(CREMESP)

References

1. Fins JJ. From psychosurgery to neuromodulation and palliation: history's lessons for the ethical conduct and regulation of neuropsychiatric research. *Neurosurg Clin N Am* 2003;14:303-9.
2. Fins JJ. Constructing an ethical stereotaxy for severe brain injury: balancing risks, benefits and access. *Naure* 2003;4:323-7.
3. Mateos-Gómez H. Psicocirurgía y bioética (editorial). *Arch Neurocién (Mex)* 2001;6(3):98-9.