

Peter Breggin's Testimony

OUTLINE OF REMARKS BEFORE THE FDA ON THE RECLASSIFICATION OF ECT DEVICES

1. The issue is not "Can ECT cause severe brain damage and dysfunction?" since every course of ECT does in fact produce an acute organic brain syndrome whose more obvious effects last for several days to several weeks after the termination of treatment. In some cases, the patient may experience global neurologic dilapidation. The question must be "Does the patient fully recover from the damage?" The burden of proof must rest with those who claim the patient recovers fully; but illogically the burden has been placed upon those who criticize the treatment.

2. A wide variety of human and animal studies spanning more than 40 years demonstrate prolonged and irreversible brain damage following the routine use of ECT. These include many clinical reports, psychological tests, human brain wave studies, human autopsy studies, animal autopsy studies, and animal behavioral studies. I have reviewed these studies in detail in *Electroshock: Its Brain-Disabling Effects* (Springer, New York, 1979) and summarized them in "Disabling the Brain with Electroshock" (Chapter 6 in *Divergent Views in Psychiatry*, M. Dongier and E. Wittkower, eds., Harper and Row, Hagerstown, Md., 1980).

3. The animal research concerning ECT-induced damage is very sparse, the total number of studies barely exceeding one dozen. The best of these studies indicate that ECT can produce permanent brain damage in the form of cell death, as well as widespread, severe damage in the form of petechial hemorrhages, vessel wall deterioration and gliosis. The changes usually mature 24-48 hours after the trauma, accounting for some negative findings. The original animal studies often used a weaker dose of electrical energy than typically used today. Animal research by itself indicates that ECT is an extremely hazardous treatment often resulting in widespread, permanent brain damage.

4. (A) The claim that modified ECT is less dangerous than unmodified, or classical, ECT is purely speculative. First, the modifications anesthetics and muscle-relaxants have been in use for nearly thirty

years (since the mid-1950s), and much of the literature I review in my book and article is the product of modified ECT. Second, the modifications were developed to prevent fractures, not to prevent brain damage. Third, studies and clinical experience indicate that the acute organic brain syndrome (the main indicator of trauma) is no less with modified ECT....Modified ECT is probably more dangerous because a greater intensity of electrical stimulation is required when the seizure threshold is raised by the CNS /central nervous system/ depressants. That three or four spontaneous seizures rarely produce the florid symptoms /of brain damage/ found after ECT suggests that the electrical current is the culprit.

4. (B) The claim that nondominant ECT /aka unilateral ECT/ is less harmful is also speculative. Subjective patient claims of less memory loss, if they can be demonstrated, may have to do with the more covert damage to the nondominant side where visual, rather than verbal, memory may be stored. Studies indicate a greater loss of visual memory in nondominant ECT. Furthermore, it is well known that right-side brain damage much more frequently produces neglect of obvious symptoms. This has been called "unilateral neglect" and anosognosia. Nondominant ECT may actually be more dangerous. Greater current and a greater number of seizures are often required to achieve the same clinical effect. This results in more frequent findings of transient neurological impairment on the opposite side following nondominant ECT. It is probable that nondominant ECT delivers more concentrated energy to the affected side of the brain, raising the possibility of more severe, localized damage to brain tissue.

5. Whatever efficacy ECT may have can be explained by the brain-disabling hypothesis. The acute organic brain syndrome results in varying degrees of apathy, indifference and euphoria, all of which can be confused with "improvement." As in other instances of generalized brain damage, the patient may for a time deny her brain damage and her personal problems, resulting in an apparent cure based on iatrogenic /doctor-caused/ mental disorder. The concept of confabulation /filling in memory blanks/ sheds light on the effect of ECT.

6. The claim that ECT is efficacious in preventing suicide has no basis in research (see Breggin, 1979). My clinical experience suggests that depressed patients who have been subjected to mental defects as a result of ECT tend to become more suicidal, much as Ernest Hemingway claimed before his suicide. Since many physicians and many large and small psychiatric hospitals never use ECT, the burden must be on the proponents of ECT to show that these physicians and hospitals have a higher suicide rate.

7. Are the patients exaggerating or lying? The vast numbers of clinical reports, bolstered by a public outcry led by former patients, indicate that patients often feel damaged by ECT. A study of denial and confabulation following brain damage suggests that brain-damaged patients tend to minimize their loss of mental function. The ECT patients I have interviewed -- even those making malpractice claims -- have tended to minimize the actual degree of their mental loss. On the other hand, we must also take serious note of how few patients have come to the defense of ECT during the current public controversy.

8. It is often argued that other medical treatments also damage the body. However, the damage produced by ECT does not improve function. It makes the patient more docile, passive, tractable or euphoric precisely by damaging the brain. Furthermore, damage to the brain, unlike damage to the heart or lungs, actually changes the person -- his or her mental faculties, including the ability to think, feel, and learn.