

What is ECT?

Dr. Northoff:

ECT means electroconvulsive therapy. And, yeah, it's also basically, you give electrical currents to your brain. That has been long regarded as a very bad treatment. It was a famous movie with Jack Nicholson, and that really discarded ECT. In the seventies, in the wake of social psychiatry, where psychotic disorders were not regarded as biological disorders, but as social disorders, ECT was of course completely discarded. And Max Fink really kept it up, and it's no doubt that ECT is a fantastic treatment for, for instance, treatment resistant depression, febrile catatonia — an absolute must — and also for non-febrile catatonia that doesn't react to lorazepam. Also, some use it for schizophrenia. So I think it can be a very effective treatment.

Unfortunately, we don't really know the mechanism. For me, it's like you reboot your brain. You induce a seizure, which of course sounds terrible. You induce a seizure in a patient, but it seems the seizure is where your brain is completely synchronized into one big part. Any regional differentiation is lost, and it probably allows the brain to reboot and to reorganize its different regions and timescales and frequencies. So this is one of the working hypotheses we're currently pursuing using imaging ECT and neural network and computational modeling. That probably is in depression for people not to slip back into depression, they use a maintenance ECT and you probably have heard about cases like that. If you forget one maintenance ECT, people slip back into a catatonic state or into depression.

So no doubt, I can only really support that treatment. You won't use it in first-line. You always would use lorazepam in first-line, if you want to use another drug in second-line, but then relatively quick also electroconvulsive therapy.