

How does mixed catatonia work?

Dr. Fricchione:

In this infrastructure that we're trying to work out, there are different switches, and those switches have to do with excitatory-inhibitory balance. The excitatory-inhibitory balance is being processed by this close relationship between the excitatory neurotransmitter glutamate and the inhibitory neurotransmitter GABA. And so at different way stations in these loops, you can convince yourself that if there's an imbalance, and it doesn't have to be a static imbalance — it can be a momentary imbalance between GABA and glutamate — you may move from stupor to excitement or excitement to stupor.

With catatonia, catatonic excitement and catatonic stupor remind us of mania and depression in bipolar illness. And so it suggests that there's something similar that's happening in these systems with these patients. Maybe that's why catatonic excitement and manic delirium are pretty much the same thing, and Max has written brilliantly about that. So it looks to us like mania, but it's connected up with delirium.

It's kind of teaching us a lesson that this explains in one fell swoop why bipolar patients are so at risk for catatonia. And it also explains why there are these similarities between the switch mechanism in bipolar illness, and the switch mechanism in catatonia.