

What role does trauma play in catatonia?

Dr. Dhossche:

There's some theoretical thinking about this, because catatonia is a human expression of what? Maybe something we also see in the animal kingdom — this reflex known as the tonic immobility reflex.

So when there is no more fight or flight, when all that seems hopeless, animals freeze, and they go into a tonic immobility state. It's a genetic, biological mechanism to optimize your chance of survival, basically. It can be very useful to shut off your metabolism, stop eating, drinking, your heart slows down — very useful if you're a cold-blooded reptile. But it's kind of serious for humans, so it can be fatal.

Some people see resemblances between a defense mechanism that animals use — the tonic immobility reflex — and the human remnant, I guess, of this defense mechanism to ward off danger. Whether it's real or perceived, it doesn't matter, as long as the biological mechanism perceives a threat that is life threatening.

When that mechanism activates, then catatonia sets in. Or if it's a medical event, really, when you have a stroke or an autoimmune illness and your body — brain most likely — perceives, "We're in real danger here, we're going to shut it down and hope we survive." So in itself, with its difficult consequences of slowing down your metabolism to the point that you may die.

So I think there's a lot of richness in that way of thinking on catatonia because it ties it in with an evolutionary defense mechanism. It opens areas for investigation for research into the mechanism of it. And it's not solely focused on the brain, because it's a total body reflex. With catatonia, everything is kind of affected — your GI, your heart slows down or races for that matter. But there's a lot of autonomic instability. And I guess higher brain functions are shut down because your body's trying to survive and not think too much.

So, I think it's useful to think that way if we're going to find some new substrates or even new treatments, if we're ever going to do that. So that ties also in the psychology of trauma, abuse, fear, catastrophic events or the perception of catastrophic events. So I think it's a nice way — an interesting way of thinking about it.