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## Right Brain: And I saw a brain die

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As an intern in medicine I had responded to and participated actively in many cardiopulmonary resuscitation (CPR) code calls. Even though the code was often unsuccessful, there was something reassuring about giving chest compressions or ventilation and I felt I had done something and given my all. Nothing, though, quite prepared me for the helplessness I felt the day I saw a brain die on the EEG.

It started off as any other day for me. I went to the neurologic intensive care unit (ICU) to review the EEG study of a patient. As a fellow in clinical neurophysiology, a good part of my day is spent looking at EEGs. Over the course of a year and a half of clinical neurophysiology training, I have seen many interesting EEG patterns and have learned to recognize their importance in the critically ill neurologic ICU patient. I feel empowered by the armament of antiepileptic drugs (AEDs) at my disposal to treat them.

Mr. X had been found face down in his house by the emergency medical services, the victim of a massive aneurysmal bleed from rupture of a posterior communicating artery aneurysm. He had a Glasgow Coma Scale (GCS) score of 5 and prognosis was listed as guarded in the chart. The neurointensivist had requested video-EEG monitoring to rule out nonconvulsive seizures. I did my customary neurologic examination and then began to review the EEG at the bedside.

The background was diffusely slow consisting mostly of a mixture of delta and some theta frequency rhythms. As I was reviewing the study in real

time, I noticed a sudden change in the EEG background.

The background progressively started getting attenuated right in front of my eyes.

I looked feverishly at the cardiac monitor at the bedside; the heart rate read 64 beats/minute. I glanced at the ventilator; it was making its usual hum as air moved in and out. If this was the heart dying out on me, I knew what to do.

Run the code!

The ACLS protocol clearly laid it out and I had drugs like atropine and epinephrine at my disposal. If the rhythm changed to one of ventricular fibrillation, I could call the defibrillator into action.

Charge-stand clear-shock!

As a neurologist I was acutely aware of the importance of this fistful of 1,500 g of wrinkled tissue, the seat of our emotions, our memory, our senses, and the motherboard of all other body systems. It is surreal when something so beautiful has such a silent death.

There were no loud noises, no creaks or groans, and no loud gasping sounds to be heard.

No drugs had been injected feverishly by doctors in white coats. For a moment I wistfully yearned for this to be a traditional code and that I could somehow reach in and CPR the brain to life. It is relatively easy to restart the heart with traditional CPR; I realized it was considerably harder to restart the brain.

As I stood and watched helplessly I saw a brain die in front of my eyes.



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