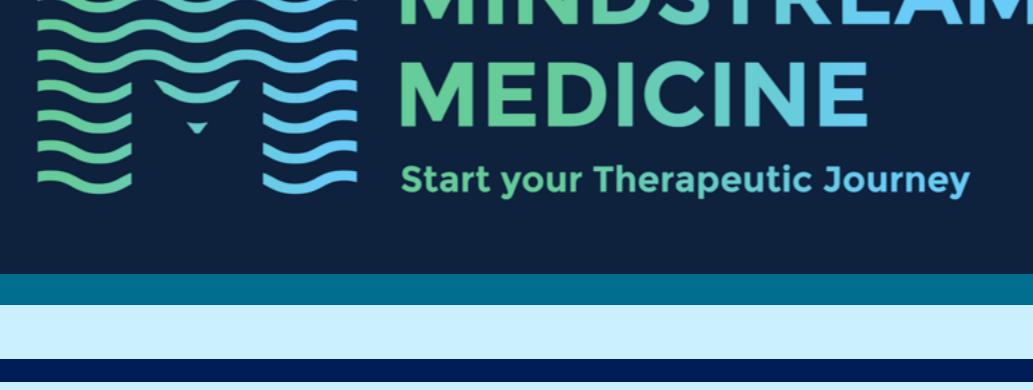


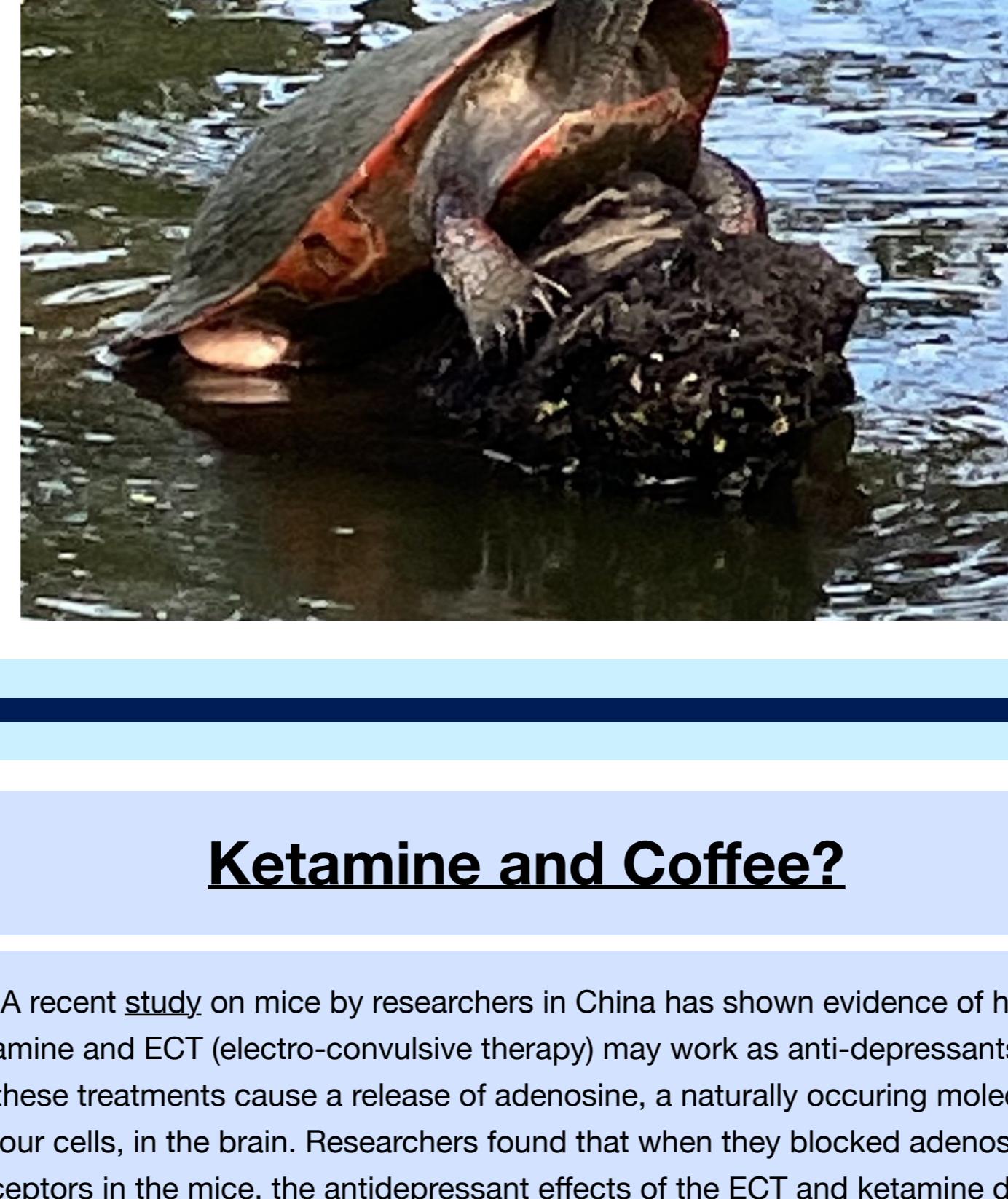
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## November/December 2025

Hello patients, colleagues and friends! Thank you for opening our newsletter. Even if you do not struggle with [Seasonal Affective Disorder](#), this can be a difficult time of year, between less daylight in the evening, colder weather, obligations to spend time with extended family, and outrageous expectations to deliver a perfect holiday experience for our loved ones. The holidays ask a lot us, let's remember to take care of ourselves this year.

[Read more here](#)

### Redbelly Turtle Mantua Creek, NJ



### Ketamine and Coffee?

A recent [study](#) on mice by researchers in China has shown evidence of how ketamine and ECT (electro-convulsive therapy) may work as anti-depressants. Both of these treatments cause a release of adenosine, a naturally occurring molecule in our cells, in the brain. Researchers found that when they blocked adenosine receptors in the mice, the antidepressant effects of the ECT and ketamine did not function. This would seem to indicate that adenosine is a key component to why these treatments are effective at reducing symptoms of depression. They also noted that caffeine is known blocker of the adenosine receptors. This is interesting because, as you can read in the article, caffeine is the most widely used psychoactive substance in the world, and regular caffeine users are less likely to be depressed than non-caffeine drinkers. So if caffeine doesn't make people depressed, why does it at the same time block these antidepressant treatments from being effective? This is new research, so there are still many questions to be answered. Should people avoid caffeine on an infusion day? For a week before and after an infusion in order to maximize the effects of the treatment? Too early to say, but we can certainly talk about this when scheduling your next booster.

[Read more here](#)

### **Ketamine: IV vs. Nasal Spray**

In new [research](#) released from Harvard-affiliated Massachusetts Brigham Hospital, clinicians studied two groups of patients with treatment-resistant depression: one group was treated with IV ketamine and the other with intranasal ketamine, or esketamine (otherwise known as Spravato). Patients in both groups received 8 treatments over 4 weeks. The patients in the IV group of the study reported faster improvement in symptoms than those in the intranasal group. Additionally, the IV group reported significantly reduced symptoms in comparison to the intranasal group. Although we do not administer Spravato at Mindstream Medicine, I'm encouraged that people unable to afford IV treatments are able to access the medicine by using their health insurance. If research continues to show that IV is superior to intranasal, hopefully we are moving toward broader acceptance of IV treatments and recognition by the FDA. This would bring us closer to having IV treatments covered by health insurance, broadening access to many more people.

### **Ketamine in the News:**

#### **From the Pages of the New York Post!**

I can't say that it's a place I usually go for the news, but please take a look at this ketamine infusion [explainer](#) recently produced by the NY Post. There are some emotional testimonials and a pretty good walkthrough of how the treatments feel and how they work. It's encouraging to see a positive assessment of ketamine therapy in the mainstream press, good to share with people who are curious.

#### **Cognitive Benefits of Ketamine:**

Because ketamine's effects on the brain have already been found to be useful for mental health issues, [researchers have been looking at](#) degenerative brain disorders such as Parkinson's disease and ALS (Amyotrophic Lateral Sclerosis) to see if ketamine treatments could be part of a solution for people living with these conditions. When ketamine has been administered to patients with treatment-resistant depression, it has been shown to "improve visual memory and working memory." At the sub-anesthesia doses typically administered as a mental health intervention, ketamine has also shown improvements in "information processing speed, attention, working memory and flexibility." Although exactly why these improvements occur is not thoroughly understood, the theory is that they are a product of the [neuroplasticity process](#).

Because these benefits are seen in the treated population of depressed patients, the idea is that degenerative brain disorder patients could potentially access the same benefits. While current therapies are aimed at preventing decline, researchers are looking to see if ketamine could actually help reverse degeneration and restore previously lost functionality. Animal studies (mice) have shown initial promise, now human studies are under way. A hopeful prospect for the future of treatment for these conditions!

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