

A broken heart? Take two Tylenol and call me . . .

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Anyone who has ever experienced heartache knows that the “ache” is not metaphorical. Hearts and minds can hurt with the intensity of a migraine. Rejection and isolation can break one’s spirits as surely as a nasty fall can splinter a femur.

So why don’t we treat psychic pain the same way we treat our bodies’ agonies? This seemed like an obvious question to University of Kentucky psychologist Nathan DeWall, yet when he searched the scientific literature, he could find no attempts to even ask the question. So he did the obvious: He handed out Tylenol to see if the drug might soothe people’s emotional suffering.

DeWall and his colleagues ran two studies. In the first, they simply gave volunteers a 1000 milligram dose of acetaminophen—the active ingredient in Tylenol—while others took a placebo. The volunteers took the drug morning and night for three weeks, during which time they also filled out a daily measure of psychic pain. Those taking the painkiller showed a steady decline in social suffering over the three weeks, while the controls showed no such improvement.

That was an intriguing finding, so the scientists decided to actually watch the brain in action during a similar trial. In this experiment, the volunteers took 2000 milligrams of painkiller for three weeks. At the end of the three weeks, they (and others who had been taking a placebo) took part in computer game that had been rigged to make some players feel excluded, much as kids might feel rejected on the playground. They scanned their brains while they were playing the game, and the results were striking: In every volunteer who experienced rejection, the brain region associated with physical pain lit up—except in those who had been taking Tylenol. In other words, the brain experienced pain just as real as it would if the body had been wounded, and the drug effectively salved that pain. The results will appear in the journal *Psychological Science* this spring.

The psychologists are not advocating that the forlorn and lonely masses run to the pharmacy to stock up on Tylenol. The drug is not great on the liver, especially in such large and frequent doses. But the findings do point toward a new line of inquiry on the link between physical and emotional pain, and may lead someday to interventions for severe social pain. The pain of chronic loneliness, the researchers say, is as harmful to health as obesity and tobacco.