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## Torture permanently damages normal pain perception, study finds

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Torture can permanently damage the normal perception of pain, according to a study of Israeli soldiers captured during the 1973 Yom Kippur War.

The soldiers were subjected to brutal torture in Egypt and Syria. Held alone in tiny, filthy spaces for weeks or months, sometimes handcuffed and blindfolded, they suffered severe beatings, burns, electric shocks, starvation, and worse. And rather than receiving treatment, additional torture was inflicted on existing wounds.

Forty years later, research by Ruth Defrin at Tel Aviv University has found that the ex-prisoners continue to suffer from dysfunctional pain perception and regulation. The study is published in the *European Journal of Pain*.

"The human body's pain system can either inhibit or excite pain. It's two sides of the same coin," said Defrin. "Usually, when it does more of one, it does less of the other. But in Israeli ex-POWs, torture appears to have caused dysfunction in both directions. Our findings emphasize that tissue damage can have long-term systemic effects and needs to be treated immediately."

The study focused on 104 combat veterans. Sixty of the men were taken prisoner during the war, and 44 of them were not. In the study, all were put through a battery of psycho-physical pain tests—applying a heating device to one arm, submerging the other arm in a hot water bath, and pressing a nylon fiber into a middle finger. They also filled out psychological questionnaires.

The researchers found that the ex-POWs showed diminished pain inhibition (the degree to which the body eases one pain in response to another) and heightened pain excitation (the degree to which repeated exposure to the same sensation heightens the resulting pain).

It's not entirely clear whether the dysfunction is the result of years of chronic pain or of the original torture itself, they added, but a statistical analysis of the test data suggested that being tortured had a direct effect.