

# Growing evidence suggests progesterone should be considered a treatment option for traumatic brain injuries

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Researchers at Emory University in Atlanta, GA, recommend that progesterone (PROG), a naturally occurring hormone found in both males and females that can protect damaged cells in the central and peripheral nervous systems, be considered a viable treatment option for traumatic brain injuries, according to a clinical perspective published in the January issue of the *American Journal of Roentgenology*.

"[Traumatic brain injury](#) (TBI) is an important clinical problem in the United States and around the world," said Donald G. Stein, PhD, lead author of the paper. "TBI has received more attention recently because of its high incidence among combat casualties in Iraq and Afghanistan. Current Department of Defense statistics indicated that as many as 30 percent of wounded soldiers seen at Walter Reed Army Hospital have suffered a TBI, a finding that has stimulated government interest in developing a safe and effective treatment for this complex disorder," said Stein.

"Growing evidence indicates that post-injury administration of PROG in a variety of [brain damage](#) models can have beneficial effects, leading to substantial and sustained improvements in brain functionality. PROG given to both males and females can cross the blood-brain barrier and reduce edema (swelling) levels after TBI; in different models of cerebral ischemia (restriction of blood supply), significantly reduce the area of necrotic cell death and improve behavioral outcomes; and protect

neurons distal to the injury that would normally die," said Stein.

PROG was recently tested in two phase 2 clinical trials for traumatic [brain injury](#) and will begin a phase 3 NIH sponsored trial soon.

"Given its relatively high safety profile, its ease of administration, its low cost and ready availability, PROG should be considered a viable treatment option — especially because, in brain injury, so little else is currently available," said Stein.

Provided by American Roentgen Ray Society

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