

POSTTRAUMATIC STRESS DISORDER IS MORE COMMON IN CHILDHOOD CANCER SURVIVORS

Posttraumatic stress disorder (PTSD) is commonly caused by exposure to a traumatic event that overwhelms an individual's coping abilities. Although the most common form of PTSD involves a violent act, there are other causes which physicians need to be aware of. One such cause is childhood cancer.

Margaret L. Stuber, MD, and colleagues, compared 6,542 childhood cancer survivors >18 years of age with 368 of their healthy siblings over a 16-year period. Of these patients, 9% of cancer survivors and 2% of healthy siblings reported functional impairment as well as distress due to PTSD.

The cancer survivors' main symptoms were avoidance of reminders of their cancer diagnosis and treatment, being easily startled, being on edge, extreme anxiety, hypervigilance, increased arousal, and phobias. Survivors reported that these symptoms kept them from functioning as normal adults. PTSD was associated with being unmarried, unemployed, earning <\$20,000/year, and an education level of high school or lower.

According to Stuber and colleagues, the severity of cancer treatment in the 1970s could be a contributing factor to the increase in PTSD rates observed in recent years. At that time, treatment consisted of head radiation for head tumors and more toxic pharmacotherapeutic options. It is thought that these treatments led to cognitive impairment, infertility, and stunted growth, which in turn has led to increased stress levels. The researchers believe that this cognitive impairment has hindered the ability of patients to both further their educations and attain quality employment that would provide them with adequate income. Today's treatment is less toxic and more improved supported care has been offered to these patients.

Stuber and colleagues believe that PTSD among childhood cancer survivors is highly treatable with medication and other therapeutic options. However, they note that addressing the issue will not be simple, and further research is needed to determine the proper treatment options for these patients.

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RESEARCHERS FIND rTMS EFFECTIVE IN TREATING TREATMENT-RESISTANT DEPRESSION

There are a myriad of options available for the treatment of treatment-resistant depression (TRD). Repetitive transcranial magnetic stimulation (rTMS) has previously been shown to be effective in the treatment of TRD. However, researchers are concerned about this treatment option due to the dearth of quality research and mixed outcomes.

Mark S. George, MD, and colleagues, conducted a randomized clinical trial to gauge the efficacy of rTMS on TRD. They studied 190 patients who were being treated for depression but were not receiving pharmacotherapy. Of these patients, 92 received rTMS while 98 received a sham treatment.

Treatment consisted of rTMS being delivered to the left prefrontal cortex at 120% motor threshold (10 Hz, 4-second train duration, and 26-second intertrain interval) for 37.5 minutes via a figure-eight solid-core coil. Sham treatment consisted of a similar coil being placed in the same area, however, there was a metal insert blocking the magnetic field. Both groups received daily treatment for 3 weeks. Patients that improved were then blindly treated for another 3 weeks.

George and colleagues found that depression remitted in 14.1% of patients in the rTMS group and in 5.1% of the sham group. It should be noted that this study had an overall retention rate of 88% (86% rTMS group; 90% sham group). Overall, patients receiving rTMS had 4.2 greater odds (95% CI, 1.32-13.24) of remitting their depression compared to the sham group. In an open-label follow-up, 30.2% of the rTMS group and 29.6% of the sham group remitted.

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