

## **Neuropathy and Muscle Cramps in Autologous and Allogeneic Hematopoietic Cell Transplantation Survivors**

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(Survey administered July 2020 – June 2021)

This study examines the frequency and severity of nerve problems (neuropathy) and muscle cramps in patients who have received hematopoietic cell transplantation (HCT). Over 1,500 long-term survivors of HCT were surveyed to understand the frequency, severity and impact of neuropathy and muscle cramps on their quality of life.

This study found that a majority of HCT survivors had neuropathy symptoms and muscle cramps, a higher figure than previous research. About 60% of the patients had symptoms associated with neuropathy, and about half of the patients reported muscle cramps. Surprisingly, those who had their own cells transplanted (autologous HCT) reported more symptoms than those who received cells from others (allogeneic HCT).

Chronic graft-versus-host disease (GVHD) was thought to be a major cause of these symptoms.

However, other factors were found to contribute to neuropathy and cramps as well, including the person's original disease and the transplant process.

For autologous HCT patients, those who had multiple myeloma reported more symptoms while those who received bone marrow instead of peripheral blood reported less muscle cramping. For allogeneic HCT patients, those with current chronic GVHD (66%) were more likely to have neuropathy symptoms during the last 3 months than those with past chronic GVHD (54%) and those who never developed chronic GVHD (45%). Patients with chronic GVHD were more likely to have muscle cramps when they had related donors or currently use steroids.

It is important to understand the causes of neuropathy and cramps to improve prevention and treatment. It was discovered that many HCT survivors do not use effective treatments or medication for their neuropathic pain and cramps, indicating a need for better approaches to improve survivors' quality of life.