Studies investigate the link between stress and immunity

By Beth Azar
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Researchers at Ohio State University have embarked on a large clinical trial to establish whether a stress-reducing intervention can bolster cancer patients' immune system. The study also will explore whether the intervention can decrease the rate of cancer recurrence, said Ohio State psychologist Barbara Andersen, PhD.

Several small-scale studies indicate that behavioral interventions geared toward relieving cancer-related stress appear to improve cancer patients' chances of survival, possibly by boosting their immune systems. Such a concept is bolstered by a large body of psychoneuro-immunology literature that clearly shows that stress can compromise immune-system functioning. It's also clear that psychological interventions help reduce stress and anxiety in cancer patients, said Andersen.

She and her colleagues, Janice Kiecolt-Glaser, PhD, and Ronald Glaser, PhD, now want to study whether stress reduction caused the immune improvements seen in the earlier cancer studies and whether those improvements might be responsible for prolonged survival. To date, the scientific community is still debating whether improving immunity can help fight the recurrence of cancer, said Andersen.

To answer these questions, the Ohio State team has embarked on a large clinical trial to establish whether a stress-reducing intervention can bolster cancer patients' immune systems and then whether these factors can decrease the rate of cancer recurrence. Their study, begun almost three years ago, will follow a socially and ethnically diverse group of 200 women with breast cancer. Half will receive a powerful intervention designed to reduce stress, while the other half will receive no intervention.

'We're seeking long-term health and psychological changes—that's the only way we can possibly affect this disease,' Andersen said.

Preliminary results from 80 patients look promising. Though it's far too early to talk about survival rates, they have indications that the women receiving the intervention are also receiving immune benefits.