Women Are More Prone to Side Effects

Women were at greater risk than men for symptomatic adverse events and hematologic events.

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Women are more likely than men to experience adverse events related to chemotherapy, targeted therapy and immunotherapy, according to a recent study.

Joseph Unger, PhD, of the Fred Hutchinson Cancer Research Center in Seattle, and colleagues analyzed sex-based differences in treatment side effects among 23,296 participants in 202 clinical trials. They looked at 13 categories of symptomatic adverse events and 14 categories of objectively measured events, including changes in lab values. They paid particular attention to hematologic events, such as low blood cell counts.

Overall, women experienced more side effects. Women were at greater risk than men for symptomatic adverse events (33% versus 28%, respectively) and hematologic events (45% versus 39%). They were also more likely to experience five or more adverse events. What's more, women had a 34% greater risk for severe side effects—rising to a 49% increased risk among those who received immunotherapy—and they were 25% more likely to experience the most severe types of adverse events. The difference appeared to be driven by severe hematologic side effects.

The researchers suggested that this disparity might be attributable to differences in medication dosage in relation to body size, drug metabolism, adherence or symptom perception. "A better understanding of the nature of the underlying mechanisms could potentially lead to interventions or delivery modifications to reduce toxicity in women," they wrote.

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