Article says radiologists need to solidify position on cancer teams
27 July 2016

Given the anticipated increase in cancer imaging over the next decade [1, 2], radiologists need to solidify their position as central members of the cancer team by identifying toxicity early and understanding the implications of their findings.

In an article titled, "A New Look at Toxicity in the Era of Precision Oncology: Imaging Findings, Their Relationship With Tumor Response, and Effect on Metastasectomy," a team of radiologists and researchers led by Stephanie A. Holler Howard, of the Department of Radiology at the Dana Farber Cancer Institute in Boston, aims to broaden the radiologist's understanding of imaging-evident toxicity.

The review article, published in the July 2016 issue of the American Journal of Roentgenology, is available through open access on the American Roentgen Ray Society's website.

Oncologists are increasingly using combinations of cytotoxic agents, molecular-targeted therapies, and immune checkpoint inhibitors to achieve disease control. Although numerous articles have examined how to optimize tumor response criteria for patients treated with these new agents, little has been written about how a radiologist's approach to imaging findings of toxicity should evolve.

"This article attempts to expand the radiologist's view of the effect of imaging-evident toxicity by delineating how oncologists grade toxicity, highlighting the potential relationship between toxicity and drug efficacy, discussing how toxicity affects patients who may ultimately undergo metastasectomy, and exploring the effect of combining multiple drug classes on severity of adverse events," Howard said.

Combinations of drug classes may amplify toxicity, yet acceptable levels of toxicity may be welcomed as a biomarker of treatment response in selected settings. Toxicity in organs that could benefit from future metastasectomies may be less acceptable as the role of surgical resection in advanced disease increases.

Newer drugs often work across many tumor types, and oncologists are increasingly experimenting with drug combinations. Toxicity with drugs in combination, however, has been unpredictable and often far more severe than when drugs are used in isolation.

"Radiologists must understand the language and multifaceted nuances of toxicity to contribute to optimized care of cancer patients and remain relevant effective members of the oncologic team," Howard said.


References:

