TECHNIQUES: IMRT

Improvement in Patient-Reported Outcomes with Intensity-Modulated Radiotherapy (RT) Compared with Standard RT: a Report From the NRG Oncology RTOG 1203 Study.

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PURPOSE:

In oncology trials, the National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) is the standard tool for reporting adverse events (AEs), but it may underreport symptoms experienced by patients. This analysis of the NRG Oncology RTOG 1203 compared symptom reporting by patients and clinicians during radiotherapy (RT).

PATIENTS AND METHODS:

Patients with cervical or endometrial cancer requiring postoperative RT were randomly assigned to standard four-field RT or intensity-modulated RT (IMRT). Patients completed the six-item patient-reported outcomes version of the CTCAE (PRO-CTCAE) for GI toxicity assessing abdominal pain, diarrhoea, and faecal incontinence at various time points. Patients reported symptoms on a five-point scale. Clinicians recorded these AEs as CTCAE grades 1 to 5. Clinician- and patient-reported AEs were compared using McNemar's test for rates > 0%.

RESULTS:

Of 278 eligible patients, 234 consented and completed the PRO-CTCAE. Patients reported high-grade abdominal pain 19.1% ($P < .0001$), high-grade diarrhoea 38.5% ($P < .0001$), and faecal incontinence 6.8% more frequently than clinicians. Similar effects were seen between grade ≥ 1 CTCAE toxicity and any-grade patient-reported toxicity. Between-arm comparison of patient-reported high-grade AEs revealed that at five weeks of RT, patients who received IMRT experienced fewer GI AEs than patients who received four-field pelvic RT with regard to frequency of diarrhoea (18.2% difference; $P = .01$), frequency of faecal incontinence (8.2% difference; $P = .01$), and interference of faecal incontinence (8.5% difference; $P = .04$).

CONCLUSION:

Patient-reported AEs showed a reduction in symptoms with IMRT compared with standard RT, whereas clinician-reported AEs revealed no difference. Clinicians also underreported symptomatic GI AEs compared with patients. This suggests that patient-reported symptomatic AEs are important to assess in this disease setting.