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BRIEF OPINION

Treatment Course Interruption/Delay Due to Weekend Breaks: Acknowledging and Confronting Personal and Professional Biases

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Rades et al (1), in the American Society for Radiation Oncology–sponsored journal *Practical Radiation Oncology*, describe a retrospective European multicenter study examining palliative radiation therapy for metastatic epidural spinal cord compression of 4 Gy in 5 fractions and whether an overall treatment time of 5 days was superior to that of 7 days; no outcome improvement was seen for treatment administered without hiatus.

Given the recent emphasis in the *International Journal of Radiation Oncology, Biology, Physics* on ethics in radiation oncology, this article provides a prime opportunity to examine a well-designed study from an ethical viewpoint (1, 2). For practical purposes, the question of whether a 5 × 4 Gy regimen for treating metastatic epidural spinal cord compression provides any difference in clinical outcome when administered over 5 consecutive days versus over a 7-day period is frankly asking whether the 2-day hiatus associated with a weekend break during treatment adversely impacts patient outcomes. With the lifestyle considerations accompanying radiation oncology as a career—particularly as the competitiveness of the specialty in the United States has increased from filling all of its National Residency Matching Program–offered positions for the first time in 2003 to the present-day environment in which it rivals more traditionally competitive subspecialties, such as neurosurgery—the inherent bias of desiring an internationally respected platform to affirm that taking weekends off during treatment does not impact patient outcomes is real and should not be understated (3-5). The aspect of weekend hiatus has historically separated radiation oncology from the majority of subspecialties, particularly those involving active procedural intervention for patient conditions (ie, vascular surgery, spine surgery, thoracic surgery).

An additional concern, impacting the decision to interrupt treatment for the duration of a weekend, is the financial burden of hiring staff (ie, radiation therapists) to cover weekends. In many instances this may be the overriding factor in weekend treatment interruption, even against physician objection. This concern has been cited in other instances, most prominently as a key factor preventing continuous hyperfractionated accelerated radiation therapy (CHART) from being adopted as standard of care for lung cancer, despite a prospective, randomized, controlled trial demonstrating equivalent 2-year survival outcomes between CHART proper and CHART plus weekend breaks, in which the treatment time in the CHART proper arm was 4 weeks shorter (17 vs 45 days) (6, 7).

There is a danger of anecdotally applying the results of Rades et al (1) to other cancers if potential convenience and lifestyle-based biases are unaccounted for. As with the vast majority of ethics cases, the bottom line is to apply the following mantra, colloquially referred to as the "golden

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rule": "Do to others as you would have them do to you" (Luke 6:31, New International Version). We should ask ourselves, would we feel comfortable if it was ourselves or our loved ones receiving treatment for spine cancer being told that it was "OK" to halt/delay their treatment for 2 days? Would we feel comfortable if our loved ones suffering from breast cancer or prostate cancer had their treatment halted by a team citing Rades et al as justification for doing so? Does this 2-day hiatus increase the risk for adverse sequelae from the underlying disease (spinal instability, neurologic deficits)? Or does it decrease the risk of treatment-related complications from an uninterrupted treatment course?

As long as we can honestly answer these questions affirmatively, we are fulfilling the Hippocratic Oath we swore when we became physicians. Because oftentimes the most convenient solution for us as physicians is not the optimal solution for our patients, it is our duty to apply this litmus test to every study and every treatment plan we present to those trusting us to care for them in the most vulnerable moments of their lives.

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