



Radiation Oncology Consultants

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ROC January 2015 Newsletter

Choosing Wisely® is an evidence-based campaign which is sponsored by the ABIM Foundation, intended to improve patient care. More than 60 specialty societies have participated in this endeavor, to assist patients make appropriate decisions about their care.

Over the past two years, ASTRO (the American Society for Radiation Oncology) has presented two lists of 5 items for the *Choosing Wisely*® campaign. These items are intended to promote dialogue between providers and patients about appropriate patient care. The aim is to ensure that patients choose care that is necessary, supported by evidence, free from harm and not duplicative of tests or procedures which have already been performed. This issue will cover 3 measures on breast cancer and 2 regarding prostate cancer. The previous newsletter evaluated items on palliative care, gynecologic and lung cancers.

Breast cancer

Don't initiate whole breast radiotherapy as a part of breast conservation therapy in women age ≥ 50 with early stage invasive breast cancer without considering shorter treatment schedules.

- Whole breast radiotherapy decreases local recurrence and improves survival of women with invasive breast cancer treated with breast conservation therapy. Most studies have utilized "conventionally fractionated" schedules that deliver therapy over 5–6 weeks, often followed by 1–2 weeks of boost therapy.
- Recent studies, however, have demonstrated equivalent tumor control and cosmetic outcome in specific patient populations with shorter courses of therapy (approximately 4 weeks). Patients and their physicians should review these options to determine the most appropriate course of therapy.

Comment: More than 5 years ago, ROC physicians adopted the use of hypofractionated schedules for many patients with breast cancer, based on the Canadian and UK randomized prospective studies showing equivalence to the longer "standard" courses of treatment. The exceptions to this may include patients who have received chemotherapy (especially including anthracyclines / doxorubicin), women with very large breasts, or those who require treatment of the axillary, supraclavicular and/or internal mammary nodes. In those patients, the standard treatment course may be more appropriate.

Don't routinely recommend follow-up mammograms more often than annually for women who have had radiotherapy following breast conserving surgery.

- Studies indicate that annual mammograms are the appropriate frequency for surveillance of breast cancer patients who have had breast conserving surgery and radiation therapy with no clear advantage to shorter interval imaging.
- Patients should wait 6-12 months after the completion of radiation therapy to begin their annual mammogram surveillance.
- Suspicious findings on physical examination or surveillance imaging might warrant a shorter interval between mammograms.

Comment: There is no evidence that routine shorter-interval imaging follow-up is of benefit for women who have undergone breast-conserving radiation therapy for breast cancer. The shorter-interval imaging was adopted as a standard practice many years ago, but there is no evidence-based rationale to continue getting mammograms every 6 months after treatment. A baseline mammogram within 6 months after completion of radiation therapy may be appropriate, but imaging after that point can be performed at (typically) annual intervals. The rationale for this is quite simple: most “local” recurrences of breast cancer occur at longer intervals (not within 2 years of treatment), and at a relatively consistent rate.

Don't routinely use intensity modulated radiotherapy (IMRT) to deliver whole breast radiotherapy as part of breast conservation therapy.

- Clinical trials have suggested lower rates of skin toxicity after using modern 3-D conformal techniques relative to older methods of 2-D planning.
- In these trials, the term “IMRT” has generally been applied to describe methods that are more accurately defined as field-in-field 3-D conformal radiotherapy.
- While IMRT may be of benefit in select cases where the anatomy is unusual, its routine use has not been demonstrated to provide significant clinical advantage.

Comment: Radiation therapy techniques for breast cancer in the past were associated with long-term cardiac risks. Newer techniques (for example, prone positioning) have significantly improved our ability to completely exclude the heart from the treatment fields in most patients with breast cancer. Intensity-modulated radiation therapy has been a significant advance for treatment of deep-seated tumors or those adjacent to critical normal structures. This occasionally applies in breast cancer, especially for left-sided breast cancers in patients needing treatment to the internal mammary nodes. This is a relatively small proportion of women with breast cancer. There may be even more advanced techniques which would be appropriate for those women (for example, the Proton Collaborative Group study BR008 which evaluates proton beam therapy in that small subgroup of patients).

Prostate cancer

Don't initiate management of low-risk prostate cancer without discussing active surveillance.

- Patients with prostate cancer have a number of reasonable management options. These include surgery and radiation, as well as conservative monitoring without therapy in appropriate patients.
- Shared decision-making between the patient and the physician can lead to better alignment of patient goals with treatment and more efficient care delivery.
- ASTRO has published patient-directed written decision aids concerning prostate cancer and numerous other types of cancer. These types of instruments can give patients confidence about their choices, improving compliance with therapy.

Comment: There is still controversy about which patients are appropriate for active surveillance. For Stage I (“low risk”) patients > 70 years of age, this is very appropriate. For younger patients, especially those with no medical co-morbidities (and an expected life-span of > 15 years, active treatment may be appropriate. ROC physicians discuss this option at the initial consultation for every patient with prostate cancer.

Don't routinely recommend proton beam therapy for prostate cancer outside of a prospective clinical trial or registry.

- There is no clear evidence that proton beam therapy for prostate cancer offers any clinical advantage over other forms of definitive radiation therapy. Clinical trials are necessary to establish a possible advantage of this expensive therapy.

Comment: ROC physicians participate in multiple prospective clinical trials evaluating the role of proton beam therapy for prostate cancer. These include numerous multi-institutional studies:

PartiQoL: A randomized prospective comparison of protons vs. IMRT for low and intermediate risk prostate cancer

PCG GU002: A randomized comparison of standard vs hypofractionated treatment for Stage I prostate cancer (the hypofractionated course is only 5 treatments – instead of being “expensive”, it may be the least expensive treatment alternative for prostate cancer!)

PCG GU003: Randomized prospective trial of hypofractionated proton therapy +/- androgen deprivation therapy for intermediate risk prostate cancer

NROR: National Radiation Oncology Registry for prostate cancer

PCG GU001: Proton Collaborative Group prospective registry trial

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