THE CAPITULATION OF RADIATION THERAPY HAS BEGUN

Over the past four years, I have written several papers that show radiation therapy is essentially worthless for men with pretreatment PSA’s over 10. Even more shocking, only about 10-20% of men with pretreatment PSA’s less than 10 will be found to have PSA’s less than 0.5, ten years later. In order to be considered cured following radiation, your PSA after radiation needs to remain under 0.5 and never rise. This is one of the reasons I never recommend radiation therapy.

At the 1994 meeting of the American Society of Clinical Oncology, held in Orlando, Florida, I attended a session on prostate cancer. A paper was presented by radiation therapists that showed the preliminary results of a study that compared Radiation Therapy alone to Radiation Therapy plus single agent Zoladex (hormone blockade). As my readers know, I never recommend monotherapy (single agent) hormone blockade. I always recommend triple hormone blockade:

(Lupron or Zoladex plus flutamide plus Proscar).

However, this study began in 1987 when it was common to use monotherapy.

At this 1994 meeting, the results showed that hormone blockade plus radiation therapy arm is doing much better than radiation therapy alone.

I pointed out to the speaker during the ensuing question and answer session that their study had just shown hormone blockade works in prostate cancer. I also stated that the next study needs a hormone blockade only arm versus hormone blockade plus radiation since, in my opinion, the just completed study proved hormone blockade is necessary, but does not confirm any value of radiation. A comment after the session went something like this:
“Bob, do you really think a radiation therapy group is going to do a study that could prove radiation is useless treatment for prostate cancer?”

This week’s (July 31, 1997) *New England Journal of Medicine* published the 45-month follow up data on this study and an editorial by Doctors John Blasko and Paul Lange followed. The study showed that a projected five-year PSA level less than 1.5 (and remember it should be less than 0.5 to be considered cured) occurred in 85% of the men on hormone blockade versus only 48% of the men treated with radiation alone. If the authors used a more honest PSA level of less than 0.5 to define “success,” then far fewer than 48% of the radiation therapy only arm would be considered successful.

Most importantly, survival was markedly improved for the men on hormone blockade. There was approximately a 27% higher survival in the hormone blockade arm; 27% higher probability of *BEING ALIVE* if you took hormone blockade.

I submit categorically that, in my very strong opinion, any man who is treated with radiation therapy alone rather than with hormone blockade plus radiation is lowering his chances for survival. I don’t yet know if radiation therapy will add anything to hormone blockade. I have a strong prejudice that it will harm more men than it will help.

Recently, Judah Folkman and others reported that prostate cancer cells make angiostatin, a potent inhibitor of angiogenesis. When you remove a primary cancer (like prostate cancer or lung cancer in animal models), angiostatin is no longer made. Angiostatin inhibits distant metastases from growing. If you remove or radiate the prostate (or other primary cancers like lung cancer), you stop angiostatin production. The result is an exponential increase in the growth rate of metastases. Removing the inhibitor frees the metastases and they grow exponentially. This is another reason why I never recommend any radical local treatment. If you don’t cure the patient, then you can cause the occult metastases to grow much faster.

References:

- O’Reilly Nature Medicine, Vol. #6, June 96, pp. 689-692
- Holmgren Nature Medicine, Vol. #2, Feb 95, pp. 149-153
- Gateley Cancer Research, Vol. 56, Nov 1,
In the August 1997 issue of the Journal of Urology, Connolly, et al., pp. 515-518 show that the cells in locally recurrent prostate cancer patients have a much higher growth (proliferation) rate compared to the original prostate cancer cells. Could it be the lack of the inhibitor, angiotatin, that causes the accelerated growth of these cells?
I believe this is one good explanation for the rapid increase we see in so many men following the failure of radiation therapy.

The second nail in the radiation therapy coffin has been placed by Dr. John Blasko. Hopefully, I helped hammer the first nail. He is the radiation therapy doctor who has championed radiation (seed) implant therapy. In the NEJM editorial, Vol. 337, No. 5, July 31, 1997, pp. 340-341, he writes:

"... treatment for locally advanced disease with ONLY androgen ablation may be as efficacious as androgen ablation combined with radiation."

I congratulate Dr. Blasko for his honesty. He, too, has seen the emperor’s new clothes. Don’t let yourself be victimized by any radiation therapist. If you accept radiation therapy alone for treatment, you are either uninformed, naive or ???

Statistics don’t lie, statisticians do. We have all heard that line. So have radiation therapists.

In the August 1997 Journal of Urology, Vol. 158, pp. 319-325, there is a great article by Frank A. Vicini, et al. Read page 323 and see Table 8 on that page. This table shows the actuarial five-year rate of biochemical control results from radiation therapy for localized prostate cancer.

For example, if your baseline PSA is 10-15, then you can look across the table and see successful outcomes for 26% under column 1; 31% under column 2; 63% under column 3, and 100% under column 4.
Your response would be that you want the treatment given to patients in column 4. That was 100% successful. However, this table actually shows that:

“Depending on which definition of biochemical control (or success) was used (based on definitions from three of the largest academic institutions in the radiotherapy literature), statistically significant differences in overall treatment outcome were detected attributable ONLY to the definition (of success) chosen.”

This means that if your definition of success is clinical local control, then you are 100% successful. If you want to call success a PSA of less than 4, you are 63% successful; if you chose a PSA of less than 1.5 to measure success, then your control rate drops to 31%; and if you choose the most honest definition of success to be a PSA of less than 1, then you are only 26% successful. In reality, many of us believe you need a PSA less than 0.5 to have meaningful success. This lowers the success rate much more.

So in the same study, your successful outcomes can range from 24% to 100% by simply lowering your standards of success. Change the definition and you get to claim 100% success.

It seems that success, like beauty, is in the eyes of the beholder.

As my grandfather once asked me:

“Bobala, what’s the catch?” “Here, grandfather, by changing your definition of success, you can fix your results and make them look so much better.” “Here is the catch, grandfather.”

And as always --

Be happy,
Be well,
Live long and prosper,

BOB LEIBOWITZ, M.D., AKA DR. BOB