

The Concerns of Young Radiation Oncologists

Prof. Subir Gangopadhyay

Professor and Head, Department of Radiotherapy

R G Kar Medical College and Hospital

The oncology horizon is fast changing, and now it is changing faster than ever. Highlights of these recent changes include emphasis on pathways and oncogenic events for tumor classification, a robust growth of novel therapeutics with the surge of large phase I–II trials, unprecedented advances in immunotherapy, precision medicine and implementation of avant garde radiation techniques. Naturally such fast changing landscape engenders excitement as well as some disquiet among the young radiation oncologists with their gaze set at the future.

The most important concern that needs to be addressed I feel is the scope and future of Radiation Oncology as a specialty. This is a question I have often faced, from young physicians deciding upon a specialty to embark or at the academic fora and meets which frequent our lives. A simple question not so long ago, this has become an increasingly delicate question to answer – where do we stand today in the realm of cancer treatment and what is to become of us in the foreseeable future? Radiation oncology is a one of a kind specialty requiring sound clinical knowledge with a thorough understanding of medical physics, and in most parts of the country a solid foundation in systemic therapy. In recent years, this approach has become increasingly absorbed with technological advances and advent of newer molecules for systemic therapy. **This increasing emphasis on technology and basic science together with important changes in the healthcare economic environment, now place the specialty of radiation oncology in a precarious position.** New treatment technologies are evolving at a rate unprecedented in radiation therapy, paralleled by improvements in computer hardware and software. Many a times keeping up with all these becomes quite a challenge for the young specialist. In some circles, the radiation oncologists feel that they are members of an ill-conceived specialty. The expectations as well as training standards greatly vary in our country, from one institution to another. At one end there is concentration on

learning nuances of irradiation techniques with emphasis on skills to operate advanced technology and at the other the custom is to train the residents in every aspect of oncology. The latter approach often is less rigorous about advanced training in radiotherapy, but to my understanding that is not so much about the approach as it is about the lack of modern radiotherapy infrastructure in most of the teaching hospitals. Role of a radiation oncologist in systemic treatments and integrated patient care is dwindling as the position of the medical oncologists become stronger by the day. India has a huge burden of cancer cases but the radiation facilities of our country are largely inadequate. Recent statistics show RT access to patients in India is dismal and is not even 40 percent. If we disregard the older outdated facilities the gap looks severe. Expectedly we also have a deficit in the number of radiation oncologists which is not reflected in the employment opportunities. While an obvious reason is insufficient number of cancer centres with radiation facilities, fragmented care also affects the situation. The case of a young radiation oncologist is, so to speak, quite catch 22 - you are expected to practice radiation only but there are a limited number of places to do so. This calls for some self-reflection, maybe we have to reconsider the position of our specialty in the field of oncology. Apart from political aspects, we can look at this from a professional point of view. The options before are – keeping it as it is now, reintegrating with radiology and extending training to a subspecialty or blending with medical oncology to clinical oncology as is already the case in some countries. The first one does not seem the best option, the second and third options are, therefore, worth discussing. With our increasing reliance on imaging in planning and delivering radiotherapy, it only makes sense to have a solid foundation in radiology. Emphasis on radiology will obviate the difficulties faced in staging, delineation and response assessment. And what about the sub-specialisations? I think that it might be the right direction to follow and even if we do not change the orientation of our specialty, subspecialization is already a norm for most specialties. One approach could be tumor site specific further training; another could be concentration on specific treatment techniques. Dedicated large centres could certainly use this approach of training but it seems to me that it will remain wishful thinking for most centres with the present organization of oncology in the country. Be it a reality check or conviction, many

colleagues want radiation oncologists to also play a role in combined modality treatment. Tumors for which no combined modality, either with cytotoxic drugs or targeted therapy, is used hardly exist anymore. This development could lead to a disease oriented clinical oncologist with expertise in radiation oncology and systemic treatment, which could be beneficial for both the patient and the doctor, because treatment will be more comprehensive and it will improve the continuity of the doctor–patient relationship.

Radiation oncology is increasingly evidence-based, with a number of large randomized trials of good methodologic quality published in the past years, yet we see so few of those from this country. **More must be done to promote scientific research among radiation oncologists in training. It should be our aim to motivate young specialists and promote scholarly activity in national and international meetings. Pursuit of research should not be limited to the mandatory dissertations required for the degree or the publications desired for academic positions; it should be an essential function.**

The nationwide trend of sending fresh-out-of-residency specialists to rural postings is another thing that can be upsetting for young specialists. While I shall not go as far as saying that rural postings are absolutely unnecessary, but it is certainly an impediment to continued medical training. The need for healthcare outreach is very understandable but we need to think if that should come at such a steep cost to the young professionals. I believe, as many of my young colleagues will agree, their right place is in a training hospital where they can undergo further sub-specialty training or gain further clinical experience in their own specialty. If a radiation oncology resident upon completing training goes to work in a non-oncology set up and continues working there for a couple of years, there is every possibility of unlearning everything. That is a fearful prospect. We should put priority on retaining residents in teaching hospitals and devise other well thought schemes to meet the health needs of the rural population.

Not just radiation oncology, oncology as a whole needs wider acceptance from the medical fraternity, if we are to expect a better future. This is not just my opinion but all projections point to the fact that cancer is to become the most dreaded NCD in near future. We need to encourage the best of our young ones to take up oncology. We need

to ensure that the young doctors are made aware of our specialty early in their career; so that by the time they graduate they become competent enough in detection and referrals even when they choose non-oncology specialties. Sending interns to brief oncology postings could be a good start. Young radiation oncologists will continue to face new challenges in clinical practice in this constantly and rapidly evolving field. By keeping up with the constant flow of new information that comes through hands on training, scientific conferences and peer-reviewed publications, as well as the development of new technologies, we will be able to treat our patients more effectively and safely. Our role in the field of oncology should be proactive, and above all, we must never forget that we are dealing with the family members and loved ones of many individuals during the most difficult part of their lives, therefore concerns of our own career should never replace our number one concern – that of the patient.