

The Crucial Role of Subspecialty Divisions in Advancing Surgical Oncology: A Comprehensive Analysis and Experience at State Cancer Institute

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Introduction

Surgical oncology stands at the forefront of cancer treatment, offering patients hope through surgical interventions aimed at eradicating or controlling malignancies. In recent years, the field has witnessed a paradigm shift with the emergence of subspecialty divisions, focusing on specific types of cancer or surgical techniques. This comprehensive analysis delves into the multifaceted importance of subspecialty divisions in surgical oncology, examining their impact on patient care, research, education and the future of cancer treatment.

Understanding Subspecialty Divisions in Surgical Oncology

Subspecialty divisions in surgical oncology represent a strategic organizational structure within healthcare systems, comprising teams of surgeons dedicated to the treatment of specific types of cancer or specialized surgical techniques. These divisions are characterized by their focused expertise, precision, and multidisciplinary collaboration, all aimed at optimizing patient outcomes and advancing the field of oncology.

1. Precision Medicine and Personalized Care

One of the primary benefits of subspecialty divisions in surgical oncology is their contribution to precision medicine. By concentrating on specific types of cancer, such as breast, gastrointestinal, or head and neck cancers, these divisions enable a tailored approach to patient care. Surgeons within these divisions develop a profound understanding of the unique characteristics of each cancer subtype, allowing for personalized treatment strategies that consider factors such as tumor biology, genetic mutations, and patient preferences.

2. Expertise and Excellence

Subspecialty divisions cultivate a cadre of surgeons with unparalleled expertise in their

respective fields. These specialists devote their careers to mastering the intricacies of particular cancers, staying abreast of the latest advancements, and honing specialized surgical techniques. As a result, patients benefit from the collective experience and proficiency of surgeons who are deeply immersed in the nuances of their specific area of focus.

3. Multidisciplinary Collaboration

While subspecialty divisions emphasize a targeted approach to surgical oncology, they also foster multidisciplinary collaboration. Surgeons within these divisions work closely with medical oncologists, radiation oncologists, pathologists, radiologists, and other specialists to develop comprehensive treatment plans that address the diverse needs of each patient. This collaborative model ensures that patients receive integrated care that optimizes outcomes and minimizes the risk of recurrence.

4. Advancing Research and Innovation

Subspecialty divisions serve as catalysts for research and innovation in surgical oncology. Surgeons within these divisions are uniquely positioned to identify areas for improvement and innovation within their respective fields. Through participation in clinical trials, translational research, and collaboration with basic science researchers, these specialists drive advancements in surgical techniques, perioperative care and adjuvant therapies, ultimately enhancing the standard of care for patients with cancer.

5. Education and Training

Subspecialty divisions play a pivotal role in training the next generation of surgical oncologists. Fellows and residents have the opportunity to learn from experts in their chosen field, gaining hands-on experience and exposure to cutting-edge techniques. This structured training environment ensures that

future surgeons are equipped with the skills and knowledge needed to provide exceptional care to patients with cancer, thus perpetuating the cycle of excellence in surgical oncology.

To illustrate the impact of subspecialty divisions in surgical oncology, several case studies and examples can be explored. These may include

- The establishment of a breast cancer subspecialty division within a comprehensive cancer center, leading to improved outcomes for patients undergoing mastectomy or breast-conserving surgery.
- The development of specialized techniques for minimally invasive surgery in gastrointestinal cancers, resulting in reduced morbidity and faster recovery times for patients.
- Collaboration between surgical oncologists and genetic counselors to incorporate genetic testing and counseling into the care of patients with hereditary cancer syndromes, such as BRCA mutations.

Our Experience at a State Cancer Institute

At GCRI we started subspecialty services in year 2016. It was very difficult step to take initially because clinicians were very much reluctant to practice only one specific surgical subspecialty. But because of strong administrative will to start subspecialty services in Surgical oncology it could be possible. There were small initial hiccups but gradually everyone accepted and enjoyed it. I have witnessed both sides of fences and felt a great difference in overall quality of work and approach of clinician while practicing general surgical oncology and working in a sub specialty domain. For the surgical oncology trainees, it becomes very easy to learn the complex surgical procedures from

experienced faculties. Their learning curve shortens and complication rates decreases significantly. Because of subspecialty services it becomes easy to witness variety of surgical procedures. Another important aspect from subspecialty division is that surgical oncology trainees find it easy to opt future working area of interest once they have observed all sub divisions very closely.

Challenges and Future Directions

Despite their numerous benefits, subspecialty divisions in surgical oncology also face challenges. It is easy to start subspecialty divisions at places where adequate trained faculties are available but very challenging in certain situations. These may include limited resources, disparities in access to specialized care, and the need for ongoing training and education to keep pace with rapidly evolving advancements in the field. Moving forward, efforts to address these challenges must be prioritized to ensure equitable access to high-quality cancer care for all patients.

Conclusion

In conclusion, subspecialty divisions in surgical oncology represent a transformative approach to cancer treatment, with far-reaching implications for patient care, research, education and innovation. By fostering precision, expertise, collaboration, research and training, these divisions elevate the standard of care for patients with cancer and drive advancements in the field of oncology. As the landscape of cancer treatment continues to evolve, the importance of subspecialty divisions in surgical oncology will only continue to grow, shaping the future of cancer care for generations to come.