

Conventional treatments in the fight against cancer.

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Introduction

Cancer, a relentless and formidable disease, has been a challenge for medical science for centuries. While innovative therapies like immunotherapy have gained prominence in recent years, conventional treatments remain a cornerstone in the battle against cancer. This article explores the enduring role of conventional treatments in the fight against cancer and their essential contribution to improving patient outcomes. Conventional cancer treatments, including surgery, chemotherapy, and radiation therapy, have been the mainstay of cancer treatment for decades. They have been responsible for extending and improving the lives of countless cancer patients by effectively targeting and eliminating cancer cells. Surgical procedures aim to remove localized tumors and cancerous tissue. Surgery is often the primary treatment for solid tumors and is particularly effective when cancer is detected at an early stage. It can also be used to diagnose cancer, determine the extent of its spread, and alleviate symptoms, such as relieving a blocked airway [1].

Chemotherapy involves the use of powerful drugs to destroy or slow the growth of cancer cells throughout the body. It is often employed when cancer has spread or when surgery alone is not sufficient. Chemotherapy can be administered orally or intravenously and is effective against various forms of cancer. Radiation therapy employs high-energy radiation to target and destroy cancer cells. It can be used as the primary treatment, in conjunction with surgery or chemotherapy, or to relieve symptoms in advanced cases. Radiation therapy is highly precise, minimizing damage to healthy tissue surrounding the tumor [2].

Conventional treatments are far from one-size-fits-all. They can be adapted to suit individual patient needs, with the aim of providing the most effective and least invasive treatment possible. The multidisciplinary approach of combining surgery, chemotherapy, and radiation therapy allows for the tailored management of different cancer types and stages. Adjuvant Therapy: In some cases, conventional treatments are used in combination. For example, surgery may be followed by chemotherapy to target any remaining cancer cells, reducing the risk of recurrence. This approach is called adjuvant therapy and is designed to improve the chances of long-term remission. Neoadjuvant Therapy: Neoadjuvant therapy, on the other hand, involves using chemotherapy or radiation therapy before surgery. This is often done to shrink a tumor and make

it easier to remove surgically, especially in cases where the tumor is large or has invaded nearby structures [3].

Palliative Care: Conventional treatments can also be used for palliative care to relieve symptoms and improve the quality of life in advanced-stage cancer patients. For example, radiation therapy can be used to reduce pain caused by bone metastases. While conventional treatments have made significant progress in the fight against cancer, they are not without challenges. These treatments can be associated with side effects that impact a patient's quality of life. Chemotherapy, for instance, can cause nausea, fatigue, and hair loss, while radiation therapy may lead to skin irritation. Surgery carries the risk of complications and a recovery period [4].

Researchers and clinicians continue to refine and improve conventional treatments to reduce side effects and enhance their effectiveness. For instance, the development of targeted therapies has allowed for more precise drug delivery, reducing harm to healthy cells. Moreover, conventional treatments are often used in conjunction with cutting-edge therapies, such as immunotherapy and precision medicine. This combination approach is expected to further improve treatment outcomes, particularly in advanced or challenging cases [5].

Conclusion

Conventional treatments, including surgery, chemotherapy, and radiation therapy, have been the foundation of cancer treatment for many years. They continue to play an essential role in the fight against cancer, offering effective and often life-saving solutions for patients. Their versatility and adaptability, as well as ongoing research to enhance their efficacy and reduce side effects, make them a vital component in the multidisciplinary approach to cancer care. As we look to the future, the integration of conventional treatments with innovative therapies holds the promise of further improving the outcomes and quality of life for cancer patients.

References

1. Altucci L, Gronemeyer H. The promise of retinoids to fight against cancer. *Nat Rev Cancer*. 2001;1(3):181-93.
2. Atun R, Cavalli F. The global fight against cancer: challenges and opportunities. *The Lancet*. 2018;391(10119):412-3.
3. Carocho M, CFR Ferreira I. The role of phenolic compounds in the fight against cancer—a review. *Anticancer Agents Med Chem*. 2013;13(8):1236-58.

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4. Rotili D, Mai A. Targeting histone demethylases: a new avenue for the fight against cancer. *Gen cancer*. 2011;2(6):663-79.
5. Dib EG, Kidd MR, Saltman DC. Case reports and the fight against cancer. *J Med Case Rep*. 2008;2(1):1-2.