

for an individual depends on the type of cancer, its severity, and other factors related to the individual patient's health and history. While some patients require only one treatment, most people have a combination of several treatments, such as surgery with chemotherapy and/or radiation therapy. Here we provide an overview of several of the main types of cancer therapies.

10.2.1 Surgery

Surgery is typically used for the initial diagnosis of cancer and also for therapy (Siegel et al., 2012). Most people with cancer will have some type of surgery. Surgery will be applied when a mass needs to be removed surgically and examined under the microscope for biopsies (Anon., n.d.-k). In certain cases, a surgeon attempts to remove the entire lump or tumor along with the lymph nodes in the area (Anon., 2014f). If the cancer has not spread to other organs and tissues, surgery usually plays a critical role to help prolong survival to a great extent (Anon., n.d.-l). For some types of cancer, surgery may be sufficient to eliminate the cancer (Anon., n.d.-m).

In most cases, patients will suffer pain or discomfort in the operated part of the body after surgery. The level of pain depends on the extent of the surgery and the location of body. Antibiotics are needed to help fight against infection, which is another concern that can occur after surgery. Other risks of surgery include bleeding, blood clots, damage to nearby tissues, and reactions to the anesthesia (Anon., 2016b).

10.2.2 Chemotherapy

Chemotherapy (chemo) is cancer therapy with one or more cytotoxic antineoplastic drugs (chemotherapeutic agents) as part of a standardized chemotherapy regime (Anon., n.d.-n). The various drugs encompass broad categories such as alkylating agents and antimetabolites (Cole et al., 1994). Traditional chemotherapeutic agents act by killing cells that divide rapidly, a critical property of most cancerous cells (Lind, 2008). The efficacy of chemotherapy depends on the type of cancer and the stage, and is often limited by its toxicity to other tissues in the body (Lind, 2008). In combination with surgery, chemotherapy has proven to be curative for some cancer types including breast cancer, leukemia, colorectal cancer, pancreatic cancer, osteogenic sarcoma, testicular cancer, ovarian cancer, and certain lung cancers, but ineffective in some brain tumors and needless in others, such as most nonmelanoma skin cancers (Hasan et al., 2006). Even though chemotherapy does not provide a permanent cure, it may be useful to reduce symptoms such as pain or to reduce the size of an inoperable tumor in the hope that surgery will become possible in the future (Anon., n.d.-n).

On the negative side, chemotherapy not only kills all fast growing cancer cells of the body, but can also affect healthy, fast growing cells because these