

THE CHEMOTHERAPY TREATMENT IN THE HEMATOLOGY DEPARTMENT OF COLENTINA CLINICAL HOSPITAL.

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Chemotherapy is a category of cancer treatment that uses chemical substances, especially one or more anti-cancer drugs (chemotherapeutic agents) that are given as part of a standardized chemotherapy regimen. Chemotherapy may be given with a curative intent, or it may aim to prolong life or to reduce symptoms (palliative chemotherapy). Traditional chemotherapeutic agents are cytotoxic, that is to say they act by killing cells that divide rapidly, one of the main properties of most cancer cells. This means that chemotherapy also harms cells that divide rapidly under normal circumstances: cells in the bone marrow, digestive tract, and hair follicles. This results in the most common side-effects of chemotherapy: myelosuppression, mucositis, and alopecia.

Most chemotherapy is delivered intravenously, although a number of agents can be administered orally. There are many intravenous methods of drug delivery, known as vascular access devices. These include the winged infusion device, peripheral cannula, midline catheter, peripherally inserted central catheter (PICC), central venous catheter and implantable port. The devices have different applications regarding duration of chemotherapy treatment, method of delivery and types of chemotherapeutic agent.

The chemotherapy must be sterile, so the patient does not get infected by the chemotherapy as it is administered directly into his bloodstream. The chemotherapy must be made accurate, which means that it is made exactly as the doctor prescribes it. It must be the right drug and the right dose. The fluid that contains the drug must be right. Also, the chemotherapy must be labeled accurately to include the necessary information. The chemotherapy must be made in a timely manner that also guarantees sterility and accuracy. Timely means the least amount of time that still produces an accurate and sterile product.

In this presentation we would like to make an overview of how chemotherapy should be prepared in a Hematology Department, and we would like to show how we do it in our ward.

In the Hematology Department of Colentina Clinical Hospital we respect these 3 most important rules of chemotherapy preparation: first - the infusion is prepared exactly as the doctor prescribes it (after he calculates the body surface area and he makes sure that the blood tests permit the administration of the treatment without risks), second - the preparation is made at the precise time so every infusion bag stays sterile while in use, and third - the infusion bags are prepared in a sterile environment (Biological Safety Cabinet) by a trained medical assistant who is wearing protective equipment.

Of course, one other thing that we take into consideration is the management of the venous line that we administer the chemotherapy, whether is a peripheral cannula or a central venous catheter.