

## **CURRENT CONCEPTS OF CARE OF THE ACUTE LEUKEMIA PATIENT IN POSTCHEMOTHERAPY APLASIA.**

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Acute leukaemia is a malignant disorder characterized by proliferation of immature hematopoietic cells and cellular maturation of these precursors and by inhibiting normal haematopoiesis.

Depending of the affected cell line the acute leukemias are classified into two broad categories: myelogenous and lymphoblastic. The treatment in accordance with international protocols is represented by chemotherapy, in order to induce complete remission. As a side effect of chemotherapy, patients develop post chemotherapy aplasia, characterized by severe neutropenia, severe anemia, severe thrombocytopenia. The main complications of bone marrow failure syndrome are: major risk of infection, bleeding, affected general status with marked asthenia, fatigue, dyspnoea, tachycardia, fever.

The role of the medical assistant both before and especially after chemotherapy treatment is extremely important, it must prepare solutions for infusion in an aseptic, controlled manner, it must monitor the administration of treatment (risk of extravasation of chemotherapy) and patient's haemodynamic parameters. Because of the severe neutropenia it is demanded that the patient is isolated in sterile rooms, has limited visitation, the medical personnel is using adequate sanitation materials (special sterile equipment by wearing gloves, gowns, disposable shoes and disposable protective masks) during the collection of biological samples, and during the administration of treatment. An important role in prevention of infections of the patient is represented by rigorous hygiene, and education in pursuit of its warning signs (fever, chills, bleeding, appearance of bleeding).

In patients with acute leukemia it is preferred that the treatment is administered threw a central venous catheter, which involves strict rules, aseptic handling specifications, and requires adequate training of medical personnel. Complications of this CVC implantation include infection and the thrombotic risk.

**Conclusion:** The acute leukemia patient by the hematologic disease particularity, and the associated complications requires careful handling from a multidisciplinary team, experienced in managing these cases in order to ensure and improve the quality of life and decrease the risk of morbidity and mortality.