

Cord Blood

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Abstract

Stem cells are naïve or master cells. This means they can transform into special 200 cell types as needed by body, and each of these cells has just one function. Stem cells are found in many parts of the human body, although some sources have richer concentrations than others. Some excellent sources of stem cells, such as bone marrow, peripheral blood, cord blood, other tissue stem cells and human embryos, which last one are controversial and their use can be illegal in some countries.

Cord blood is a sample of blood taken from a newborn baby's umbilical cord. It is a rich source of stem cells, umbilical cord blood and tissue are collected from material that normally has no use following a child's birth. Umbilical cord blood and tissue cells are rich sources of stem cells, which have been used in the treatment of over 80 diseases including leukemia, lymphoma and anemia as bone marrow stem cell potency. The most common disease category has been leukemia. The next largest group is inherited diseases. Patients with lymphoma, myelodysplasia and severe aplastic anemia have also been successfully transplanted with cord blood. Cord blood is obtained by syringing out the placenta through the umbilical cord at the time of childbirth, after the cord has been detached from the newborn.

Collecting stem cells from umbilical blood and tissue is ethical, pain-free, safe and simple. When they are needed to treat your child later in life, there will be no rejection or incompatibility issues, as the procedure will be using their own cells. In contrast, stem cells from donors do have these potential problems.

By consider about cord blood potency, cord blood banks (familial or public) were established.

In IRAN, four cord blood banks has activity, Shariati BMT center cord blood bank, Royan familial cord blood banks, Royan public cord blood banks and Iranian Blood Transfusion Organ cord blood banks.

Despite 50,000 sample which storage in these banks, but the user centers are few, we hope in all providence the transplantation center will establish by good activity to improve social welfare.

Key words: Bone marrow, Cord blood, Peripheral blood.

Oral Presentation

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