Written by Mehr News Agency
Sunday, 30 July 2023 07:35 -

Cell-based treatment, which mostly banks on human stem cells, is a new method used to treat difficult diseases such as cancer and diabetes, and its technology currently exists in Iran.

Royan Institute takes advantage of umbilical cord blood, which is rich in stem cells, to treat all kinds of diseases that are otherwise impossible to radically treat.

Various ailments affecting the musculoskeletal system as well as different kinds of lymphocytic and myeloblastic blood cancers are treatable using this kind of cells.

Abdolhossein Shahverdi, a faculty member at Royan Institute says one of the projects that the institute is currently working on in cooperation with a knowledge-based company is using stem cells derived from umbilical cord blood to help children afflicted with cerebral palsy.

Moteza Zarrabi, who heads the umbilical cord blood bank, says, “It is possible to treat more than 80 types of blood and other diseases using stem cells obtained from umbilical cord blood.

These cells are currently being used to treat blood diseases such as thalassemia, various types of blood cancer, immunodeficiency syndromes, and congenital anemias.

The institute has been also successful in treating a three-year-old girl with lymphocytic leukemia by using her own sister’s umbilical cord blood. Her disease had been already proven to be resistant to conventional forms of chemotherapy.

Royan Institute has also been active in finding treatments for articular and eye diseases.

The institute is now a vanguard in treating diseases using stem cells, and one of its most recent projects is to use artificial skin made from a patient's own cells to treat victims of various types of burns.

The institute is also active in the field of treating non-blood forms of cancer using stem cells. According to the head of the institute, this kind of treatment has passed its first phase at the institute and its goal is to enable the patient's own immune cells to fight and destroy cancerous cells.

Royan Institute started its work in the field of treating infertility in 1991, but it is now active in various areas of biological and genetic research. It has 11 affiliated knowledge-based companies working in different fields, including the production of advanced drugs.

In the field of treating infertility, which is the main area of the institute's work, it has helped with the birth of over 40,000 children since it was established three decades ago.