SEPARATION OF PANCREATIC ISLANDS FROM A FLUID MEDIUM

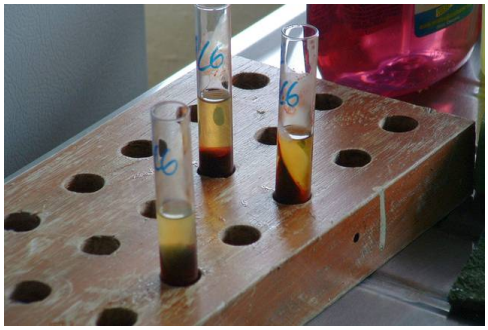
Description:

Pancreatic islet transplantation is a pioneering technique in the world for the treatment of type 1 diabetes. Mainly, the technique consists of the infusion of pancreatic islets obtained from the pancreas of brain-dead donors. The islets are usually infused into the liver of the patient, so that they begin to produce insulin, which actively regulates the level of glucose in the blood. In this way, the patient can remain independent of periodic insulin injections. Obtaining islet cells from one or more donor pancreas remains a limiting factor in the process, as it requires a continuous centrifugation process. Thus, the present invention addresses this and other problems of current methods with a new centrifugal device specially designed to achieve optimal separation of pancreatic islet cells from a fluid solution in which they are suspended.

Keywords:
Health, Medical Devices, Biomedicine

Sectors:
Biotechnology, Health

Areas:
Health Sciences, Therapeutics



Advantages:

The main advantages of the present invention is the considerable reduction in handling since it is a continuous centrifugation process. Therefore, this new device makes it possible to reduce the risk of tissue contamination.

Uses and Applications:

The present invention belongs to the field of medical devices, and more specifically, to the field of pancreatic islet cell transplantation. This technique allows a more efficient purification of pancreatic islets from a fluid medium.

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