2020 - IRREVERSIBLE ELECTROPORATION FOR THE TREATMENT OF LIVER AND PANCREATIC CANCER

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Introduction: Irreversible electroporation (IRE) is a non-thermal ablative method that is based on the application of short high voltage and low frequency electric fields to create nanoscale pores, resulting in the permeabilization of the cell membrane. Due to the mostly non-thermal effect, it would allow the ablation of pancreatic and liver tumours that are localised close to major blood vessels or other sensitive's structures such as nerves or bile ducts, maintaining them intact.

Objectives: to analyse the safety, effectiveness, considerations for use, and the economic, organisational, social, ethical, or legal aspects arising in relation to the use of irreversible electroporation for the treatment of pancreatic and liver cancer.

Methods: A systematic literature search was conducted in the main medical databases, including Medline, Embase, Centre for Research and Dissemination (CRD), Web of Science up until January 2019. The selection of articles was made according to previously established inclusion/exclusion criteria. The main features and results of the studies that were included were summarised in evidence tables. A synthesis of the evidence was carried out using the GRADE system. In order to evaluate the bias risk of the studies, specific tools were used depending on the type of study. The quality of evidence was evaluated using the GRADE system. Study selection, data extraction and evaluation of evidence were performed independently by two members of the authoring team.

DOCUMENTOS RELACIONADOS

Summary

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