

# Clinical and cost effectiveness of endoscopic bipolar radiofrequency ablation for the treatment of malignant biliary obstruction: a systematic review

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**Declared competing interests of authors:** Dawn Craig was a member of Health and Social Care Delivery Research (HSDR) Researcher-Led Panel and is a member of the HSDR Funding Committee. John Leeds has received investigator-initiated trial funding from Medtronic (Dublin, Ireland) and honoraria for lectures from Mylan/Viatris (Canonsburg, PA, USA) and Olympus (Southend-on-Sea, UK).

Published May 2023

DOI: 10.3310/YVMN9802

## Plain language summary

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Health Technology Assessment 2023; Vol. 27: No. 7

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# Plain language summary

## What was the question?

The bile and pancreatic ducts transport fluids to the intestines to help people digest their food properly. Some types of cancer can cause these ducts to become totally or partially blocked.

We wanted to know if endoscopic radiofrequency ablation is safe and works well to treat people who have one of these blockages that cannot be removed by surgery.

Radiofrequency ablation burns away a blockage by hitting it with radio waves. Endoscopic means that the radio waves are directed to the blockage using a thin, tube-like wire with a camera at the end. During radiofrequency ablation, a person might have a small tube called a stent put into their bile or pancreatic duct to keep it open or to replace an already blocked stent.

## What did we do?

We searched for research studies that looked at (1) whether or not radiofrequency ablation was able to remove blockages from the ducts, (2) if radiofrequency ablation allowed people to live longer, (3) if patients had a better quality of life after radiofrequency ablation, (4) if radiofrequency ablation caused any side effects and (5) how much it costs to treat people with radiofrequency ablation.

## What did we find?

We found that treatment with radiofrequency ablation before giving a person a stent helped them to live a little longer with their cancer. We did not find any evidence that radiofrequency ablation increased pain or swelling in the bile duct or pancreatic duct. Radiofrequency ablation might cause more swelling in the gall bladder than having a stent without radiofrequency ablation, but there was not enough research available for us to be certain of this.

## What does this mean?

Radiofrequency ablation before inserting a stent could be a safe option to add to treatment of bile and pancreatic duct blockages caused by cancer. There is limited research evidence and so we are unable to recommend radiofrequency ablation as a treatment for standard clinical practice.

# Health Technology Assessment

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 4.014

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## This report

The research reported in this issue of the journal was funded by the HTA programme as project number NIHR129784. The contractual start date was in March 2020. The draft report began editorial review in April 2021 and was accepted for publication in June 2022. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

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