Thoracoscopy and talc poudrage compared with intercostal drainage and talc slurry infusion to manage malignant pleural effusion: the TAPPS RCT

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Declared competing interests of authors: Ramon Luengo-Fernandez reports grants from the National Institute for Health Research (NIHR) Health Technology Assessment (HTA) programme outside the submitted work. Najib M Rahman reports personal fees from Rocket Medical plc (Watford, UK) outside the submitted work. Nick A Maskell is a member of the NIHR HTA Commissioning Board.

Published June 2020
DOI: 10.3310/hta24260

Plain English summary

The TAPPS RCT
Health Technology Assessment 2020; Vol. 24: No. 26
DOI: 10.3310/hta24260

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In patients with cancer, fluid can build up in the space between the chest wall and lung, causing breathlessness. The fluid can be drained using a small tube inserted between the ribs under local anaesthetic. However, it often recurs. To avoid this, doctors usually inject talc powder (mixed into a slurry) back down the drainage tube to try to ‘stick’ the lung to the inside of the chest wall. If successful, this prevents the fluid reforming. This procedure is called pleurodesis.

An alternative is to insert a camera into the chest under light sedation and local anaesthetic (a ‘thoracoscopy’) and spray talc directly onto the inside of the chest wall (poudrage). This may be more effective, although this has not been proven and it is a slightly more complex procedure.

Therefore, this trial was conducted to see if poudrage was more effective than slurry. A total of 330 patients were recruited from 17 UK hospitals who had chest fluid due to cancer. They were divided evenly, with half receiving standard drainage and slurry and the other half receiving a thoracoscopy and poudrage. They were followed up for 6 months. We measured how many experienced a recurrence in fluid build-up 3 months after treatment, as well as other impacts, including if there was any difference in the long-term costs.

No difference in clinical effectiveness was found between talc poudrage and talc slurry. Poudrage was unlikely to be cost-effective.

In summary, the researchers conclude that slurry is likely to be the preferable method.
Health Technology Assessment

ISSN 1366-5278 (Print)
ISSN 2046-4924 (Online)
Impact factor: 3.819

Health Technology Assessment is indexed in MEDLINE, CINAHL, EMBASE, the Cochrane Library and Clarivate Analytics, Science Citation Index.

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This report

The research reported in this issue of the journal was funded by the HTA programme as project number 10/50/42. The contractual start date was in August 2012. The draft report began editorial review in November 2018 and was accepted for publication in May 2019. 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.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care.

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