

Surgical resection of lung cancer in England: more operations but no trials to test their effectiveness

We appreciate the interest of the Leicester team and their co-authors.^{1 2} Their contributions to thoracic surgical service provision are internationally recognised. We agree with them that when variation in clinical practice is discovered, it merits critical examination. The discovery of variation provides the impetus to resolve the uncertainty that often underlies it. When there is good evidence for the effectiveness of surgery in particular patient groups, we can take an evidence based stance on which patients are being disadvantaged by variation in practice, but in the absence of evidence we should not assume that more care is better care.³

We used radical mastectomy for breast cancer as an example. An RCT published in 1981⁴ added critical weight to a consensus developing during the 1970s.⁵ The findings of the RCT explicitly allowed the harm of surgery to be reduced without compromising effectiveness. Evidence based practice confined the role of surgery in breast cancer to control of the primary tumour and it became the principle that lesser operations were preferable. It was *not* that mastectomy 'evolved' to be a more effective operation as Lau and colleagues imply; radical mastectomy was simply abandoned. There are parallels to be drawn with lung cancer. The rationale for radical mastectomy, the benefit of which was refuted by RCT evidence, was to extend the reach of the operation in the pursuit of involved nodes. It would help if the boundary beyond which lung cancer surgery is unavailing were better defined and then the least damaging operation that achieves its objective could be universally recommended.

There was no devilment intended in our comments. We simply want to promote the cause of the 'fair test' as a means to gain unbiased evidence.^{6 7} David Waller, a founder and lead surgeon in the MARS (Mesothelioma and Radical Surgery) trial, knows well that recruitment into trials is not easy but MARS has allowed cancer teams to advise people with mesothelioma, on the basis of evidence, that extrapleural pneumonectomy is not in their best interest.⁸ In Britain at least this evidence eradicated the variation in mesothelioma practice that went before. For lung cancer we have no such

RCT evidence to define the extent of disease that is amenable to cure, or of the extent of surgery beyond which there is no additional benefit.

Only when we have evidence can we make clear recommendations as to what should be done in the best interests of patients and so reduce variation. Our editorial which headlined the need for trials to test effectiveness of lung cancer surgery⁸ should be viewed as complementing the work published in *Thorax* on variation in lung cancer resection rates^{9 10}. Rather than counterpoint in the sense of contesting a proposition, we prefer the original meaning of the word: the setting of two melodies in conjunction with one another to create a harmonious effect.

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