Lymphadenectomy in endometrial cancer

Mourits, M. J. E.; Bijen, C. B. M.; de Bock, G. H.

Published in:
LANCET

Publication date:
2009

Lymphadenectomy in endometrial cancer

The main finding of the MRC ASTEC trial (Jan 10, p 125)[1] is that there is no evidence of benefit from pelvic lymphadenectomy for patients with endometrial cancer. In this trial, surgery consisted of a total abdominal hysterectomy and bilateral salpingo-oophorectomy with or without pelvic lymphadenectomy by laparotomy. However, surgery was also allowed by laparoscopy "provided that the procedure could be accomplished safely and as thoroughly as an open procedure". However, whether laparoscopy for endometrial cancer is associated with a better or worse prognosis than open surgery is not known.

Since the primary outcome of the study was whether lymphadenectomy could improve the survival of women with early endometrial cancer when compared with surgery without lymphadenectomy, we are puzzled as to why surgeons were allowed to enter patients who underwent a non-standard surgical procedure. Although the proportion who underwent laparoscopy was similar in both groups (6%), and hence the estimate of the difference between the groups is unlikely to be affected, the absolute figures for survival might be changed either positively or negatively.

Total laparoscopic hysterectomy is not a standard surgical procedure in endometrial cancer. Laparoscopy for endometrial cancer can only be considered equivalent to an open surgical procedure when this has been proven by a randomised controlled trial. Since we are still awaiting the results of the GOG-LAP2 study in early-stage endometrial cancer—the first randomised trial powered for survival as a primary outcome—this is not the case yet.

We declare that we have no conflict of interest.

*M J E Mourits, C B M Bijen, G H de Bock
m.j.e.mourits@og.umcg.nl

Department of Gynaecologic Oncology (MJEM, CBMB) and Epidemiology (GHdB), University Medical Center Groningen, University of Groningen, PO 30.001, 9700 RB Groningen, Netherlands

1 The writing committee on behalf of the ASTEC study group. Efficacy of systematic pelvic lymphadenectomy in endometrial cancer (MRC ASTEC trial): a randomised study. *Lancet* 2009; **373:** 125–36.

I have some concerns about the ASTEC study.[1] First, in the standard surgery group, surgeons could remove pelvic lymph nodes if they believed this to be in the woman's best interest. This concession contradicts the aim of the study "to test the therapeutic effect of lymphadenectomy". The final conclusion should thus be that lymphadenectomy cannot be recommended unless the surgeon believes it is in the women's best interest (whatever is meant by that).

Second, inclusion of low-risk women (43%) in the study will have diluted any possible beneficial effect of lymphadenectomy in the high-risk group. Third, half the patients had 12 nodes or fewer removed (median 12). Other studies of therapeutic lymphadenectomy have a much higher median (31).[2] Further studies[3] have set 12 nodes as the minimum for better staging.

Fourth, despite there being more women with high-risk and advanced cancer in the lymphadenectomy group, radiotherapy was still given to an equal number of women in each group, resulting in a higher proportion of the high-risk-early-stage (4%) and advanced cancer (8%) groups undergoing radiotherapy in the standard group. These were even higher—5% and 9%, respectively—for external-beam radiation therapy. The final results were not adjusted for this.

Finally, since randomisation did not necessarily prove reliable (there was a 10% difference in stage IC disease between groups), the second randomisation (radiotherapy) might have invalidated the results of the surgical treatments.

I declare that I have no conflict of interest.

Aoun Hakmi
aoun_hakmi@hotmail.com

Conquest Hospital, St Leonards on Sea TN37 7RD, UK

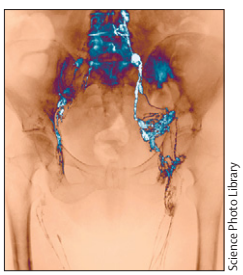
1 The writing committee on behalf of the ASTEC study group. Efficacy of systematic pelvic lymphadenectomy in endometrial cancer (MRC ASTEC trial): a randomised study. *Lancet* 2009; **373:** 125–36.
2 Mohan DS, Samuel MA, Selim MA, et al. Long-term outcomes of therapeutic pelvic lymphadenectomy for stage I endometrial adenocarcinoma. *Gynecol Oncol* 1998; **70:** 165–71.
3 Lutman CV, Havrilesky LJ, Cragun JM, et al. Pelvic lymph node count as an important prognostic variable for FIGO stage I and II endometrial carcinoma with high-risk histology. *Gynecol Oncol* 2006; **102:** 92–97.

The ASTEC study group[1] conclude that a systematic lymphadenectomy in endometrial cancer cannot be recommended as a routine procedure because of lack of benefit in terms of recurrence-free and overall survival. However, there are several reasons why the ASTEC trial did not show improved overall survival with routine lymphadenectomy.

First, the number of lymph nodes resected was insufficient in many patients. Although the median number resected overall was 12, 35% of patients in the lymphadenectomy group had nine or fewer lymph nodes removed. Cragun and colleagues[2] showed that removal of more than 11 pelvic nodes had an effect on overall survival. Chan and colleagues[3] showed that, in intermediate-risk and high-risk endometrial cancer, patients with more than 10 nodes harvested have an improved outcome.

Second, many patients with low-risk endometrial carcinoma, and hence a low risk of lymph-node involvement, were included (eg, only 41% had stage IC–IIB disease, and only 22% presented with poorly differentiated tumours). The high rate of inclusion of low-risk patients and the low number of lymph nodes removed are the reasons for the low rate of involved lymph nodes seen in the lymphadenectomy group (9%).

Third, the study group did not assess the para-aortic nodes. However, up to 67% of patients



Science Photo Library