

# Is routine follow-up after endometrial cancer justified?

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## Résumé

À NOTRE ÉPOQUE DE LA MÉDECINE FONDÉE SUR LES DONNÉES PROBANTES, même les interventions médicales et les protocoles les plus acceptés sont réévalués sur le plan scientifique. Dans ce numéro (page 879), le Dr Olu O. Agboola et ses collègues examinent l'effet qu'a sur le taux de survie le suivi de routine des patientes traitées pour un cancer de l'endomètre. Ils concluent que le protocole standard constitué de visites cliniques répétitives, de radiographies pulmonaires et de tests de Papanicolaou ne présente aucun avantage pour la survie et n'est pas efficace sur le plan des coûts. Néanmoins, il est peut-être prématuré de laisser tomber le suivi de routine dans de tels cas. Des études contrôlées randomisées de grande envergure s'imposent si l'on veut régler la question. Par ailleurs, si ces études ne sont pas possibles sur le plan éthique, il faut effectuer à des études non-randomisées qui tiennent compte de données relatives à des protocoles différents et tirées d'importants échantillons de patientes.

**W**hy are things done the way they are in medicine? Which of our protocols, procedures and patient management strategies are based on scientific evidence, and which are matters of tradition? Until quite recently most physicians would never have thought to question the extent to which their practice was based on custom and convention. Increasingly, however, many so-called "routine" medical procedures are being subjected to the harsh light of scientific scrutiny, and some have been abandoned in view of evidence of their lack of benefit. This is all to the good of improving medical practice. Nevertheless, some practices linger on even when they are shown to be less than effective. Episiotomy, for example, was introduced in the 18th century without any evidence that it was beneficial.<sup>1</sup> Recent clinical trials have failed to demonstrate that episiotomy has substantial benefits, and there is some evidence that patients who undergo the procedure fare worse than those who do not.<sup>2</sup> Nonetheless, episiotomy is still used in many centres. Other examples abound, such as fluid deprivation before surgery<sup>3</sup> and the use of routine preoperative tests.<sup>4</sup>

For physicians who want to practise scientific medicine, the tough question is, When is the evidence sufficient to justify abandonment of a long-standing, seemingly innocent (although expensive) practice such as preoperative testing? To put it differently, Does the absence of proof that a procedure is beneficial imply that it should be abandoned? These are the questions posed in this issue by Dr. Olu O. Agboola and colleagues in their evaluation of current follow-up practices for women with endometrial cancer (page 879).

Their centre instituted a uniform protocol for all patients with endometrial cancer. This included repeat (but diminishing) clinic visits in perpetuity, as well as various laboratory tests (including chest radiography and Papanicolaou [Pap] testing). Although this protocol is widely considered "best practice," the scientific evidence, if any, on which it is based is unknown.

It is possible that such follow-up routines are based on an outdated theory of cancer progression, by which cancer was viewed as a local disease that spread to local lymph nodes and then systemically to other sites. Given that theory, routine follow-up made intuitive sense: recurring cancer could be found before it spread. However, we now know that primary tumours can produce micrometastases even when they are very small, and that in such cases it is much less likely that routine follow-up will find recurrent disease in time to do anything meaningful about it.



## Editorial

## Éditorial

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Given these concerns, do Agboola and colleagues offer sufficient evidence that we should abandon the time-honoured practice of routine follow-up for patients with endometrial cancer? They carried out a chart review and patient status ascertainment for 432 women with cancer of the endometrium referred to their regional cancer centre from 1982 to 1991. All women had stage I to III cancer and had received similar treatment with curative intent. There was no difference in survival for women whose recurrences were detected by routine follow-up ("routine cases") versus those in whom recurrence was detected in the interval between routine visits ("interval cases"), nor were there differences between women who had symptomatic versus asymptomatic recurrences. Few cases were detected by routine chest radiography and even fewer by routine Pap testing.

The study has certain limitations. First, the small patient sample raises the question of whether there was sufficient statistical power to detect a difference between 2 groups (e.g., routine v. interval cases) should one have existed. Second, the loss to follow-up of 20% of patients was relatively high. Third, the study was observational and may not have controlled sufficiently for other factors that may have affected survival. Some of these concerns could be evaluated by a sensitivity analysis to test the extreme scenario. For example, what might be the effect if all patients lost to follow-up were interval cases who died?

The role of patients' concerns is discussed indirectly. The authors note that the psychosocial support that derives from routine follow-up may be of benefit. However, it is equally possible that routine visits and tests provoke unnecessary anxiety and discomfort. This question requires further research.

The authors also discuss costs of some of the routine laboratory tests and of the administration of follow-up visits. They argue that the marginal costs of Pap testing (given the poor "yield") are not justified, while the costs of chest radiography might be defended. Although too few details are given about the cost analysis to permit independent assessment, this finding again supports their conclusions regarding the dubious continuing value of these laboratory tests.

The authors ask whether nursing staff could be replaced by volunteers. Since nursing staff account for 10% of the cost of routine physical examination, this is a fair question; however, the authors might also have considered whether substituting nurses for some *physicians* might be even more cost-effective.

Can we come to any conclusions about routine follow-up of patients with cancer? Agboola and colleagues question the value of the current protocol for patients treated for endometrial cancer and conclude that routine follow-up has no bearing on survival. Other researchers have found no as-

sociation between type of surveillance, costs of surveillance and survival in patients with cancer of the colon<sup>5</sup> or breast cancer.<sup>6</sup> A recent review of randomized and nonrandomized studies of follow-up for colorectal cancer showed that there was insufficient evidence to "support or refute the value of follow-up surveillance programs to detect the recurrence of colorectal cancer."<sup>7</sup> Previous studies had small numbers of patients, differing follow-up protocols and various methodologic limitations. However, all have been consistent in finding no benefit of expensive laboratory tests or a survival advantage for intensive versus less intensive follow-up.

Yet Agboola and colleagues are reluctant to say that there is no value to follow-up itself. Instead, they conclude that current protocols should be made more cost-effective. They are right to be cautious. More study is needed before a reasonable decision can be made to abandon routine follow-up. This issue is crying out for a more definitive large-scale randomized trial of routine follow-up versus no routine follow-up. This may be difficult to achieve for ethical reasons. A more feasible approach may be to use administrative data sets and clinical records as a basis for an evaluation of differing follow-up protocols. The work by Agboola and colleagues should be expanded to other cancer treatment centres to obtain a much larger study sample. With better funding, doubtless more "lost" patients could be tracked. More emphasis on the role of patient attitudes, concerns and preferences would also greatly improve such studies.

Physicians who want to practise evidence-based medicine need and should demand more comprehensive scientific scrutiny of even the most widely accepted practices. Agboola and colleagues have made a valuable contribution by taking a hard look at an accepted follow-up routine and pointing the way for further research.

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