Tertiary research applied to primary care

I was intrigued by Dr Ogle’s inference that, since our first duty is to our patients, participating in clinical research in practice is somehow abusing them. I completely agree that our first duty is to our patients, but I believe it is unethical to continue to treat them with outdated therapies or to use treatments without evidence of their effectiveness.

We are aware that treatments derived for purified populations in quaternary teaching hospitals are often inadequate, inappropriate, or simply ineffective for our patients in family practice. This might be because our patients have more than one condition at the same time or are just at an earlier, poorly-defined, stage of the disease. I believe we have an ethical duty to take part in clinical trials of the effectiveness (not efficacy) of new medications thrust upon primary care without any testing there.

The extrapolation of benefit from the specialized, highly controlled hospital clinical trial to primary care practice is often not justified.

Some pharmaceutical companies are aware of this and more are recruiting family practitioners into studies. Admittedly, some of these studies are undoubtedly questionable. Physicians should check whether these studies are funded by a company’s research and development division or the sales division.

Agencies such as the Alberta Heritage Foundation for Medical Research, which support family practice research, are few and far between. The government-initiated Canadian Institutes of Health Research refused to have an Institute of Primary Care despite the population involved, because primary care did not have a big enough history of Medical Research Council grants. In the meantime, family physicians might have to go to the marketplace for funding if they are to do any research of their own.

Certainly we should be careful which dances we choose and who we dance with, but we have to stay on the dance floor for the benefit of our patients.

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References

Know your “MeSH” terms

In regard to the CyberSearch column, “Grapefruit” in the September issue, I would guess that your search on the National Library of Medicine’s (NLM) PubMed utility failed because you did not use the proper search terms or “MeSH” headings as the NLM calls them. Unfortunately, you have to be familiar with the correct terms for a given topic, which is not always easy. When I cannot find something on MEDLINE, my next step is invariably to check for MeSH terms.

Statins are, of course, hepatic hydroxymethyl glutaryl (HMG) reductase inhibitors, but unlike “statin” or “statins,” this is a proper MeSH term. A search using “grapefruit juice” and “HMG reductase inhibitors” on both PubMed and the newer (and I think preferable) NLM Gateway (http://gateway.nlm.nih.gov/gw/Cmd) returned seven articles, of which the second was “Grapefruit juice has minimal effects on plasma concentrations of lovastatin-derived 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors.”

In a randomized crossover study, 16 healthy subjects received a single 40-mg dose of lovastatin in the evening after each consumed a 240-mL (8-ounce) glass of regular-strength grapefruit juice or water with breakfast for 3 consecutive days. The authors concluded that “Daily consumption of a glass of regular-strength grapefruit juice has a minimal effect on plasma concentrations of HMG-CoA reductase inhibitors (approximately 30% to 40% increase) after a 40-mg evening dose of lovastatin.”

It took me less than a minute to find the article using NLM Gateway, but I had the advantage of knowing the