

an intensive drug-advertising program. This type of program is able to bias such studies in at least 3 ways.

The first and most obvious way is the effect of free samples. When these studies were carried out, many patients were being given free samples of angiotensin-converting-enzyme (ACE) inhibitors; patients who did well on the sample received a prescription for the drug, and patients who did poorly were tried on something else. In contrast, patients whose initial therapy was thiazides (no free samples) were all given a prescription from the start. Because free samples are not measured as dispensed drugs, the appearance created is that adherence is better for ACE inhibitors than for thiazides.

The second way is the strong physician bias that intensive advertising creates in favour of ACE inhibitors and against thiazides. This bias is conveyed to the patient and affects adherence to treatment.

The third way is that a drug company limits its funding to studies of those populations for which it is relatively certain what the outcome will be, on the basis of its own data. This is called selection bias. Caro and Payne imply that the company funding their study<sup>3</sup> was not biased. They neglect to mention that Bristol-Myers Squibb markets fosinopril, an ACE inhibitor.

I reiterate that the best way to measure adherence to different antihypertensive therapies is to use the randomized double-blind design. In this type of study, adherence is affected by the drug's characteristics and not by other influences.

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#### References

1. Wright JM. First-line drugs for hypertension [letter]. *CMAJ* 2001;164(2):178.
2. Wright JM, Lee CH, Chambers GK. Real-world effectiveness of antihypertensive drugs [letter]. *CMAJ* 2000;162(2):190-1.
3. Caro JJ, Salas M, Speckman JL, Raggio G, Jackson JD. Persistence with treatment for hypertension in actual practice. *CMAJ* 1999;160(1):31-7.
4. Payne KA, Esmonde-White S. Observational

studies of antihypertensive medication use and compliance: Is drug choice a factor in treatment adherence? *Curr Hypertens Rep* 2000;2:515-24.

### Lithotripsy comes to Ottawa ... at last

In July 2000 the Ontario Ministry of Health and Long-Term Care announced that it would fully fund a lithotripsy program in Ottawa. I write to alert readers to the complexity of getting things done with this ministry and to thank the many people who helped to finally bring lithotripsy therapy to Eastern Ontario.

Extracorporeal shock-wave lithotripsy for the management of ureteric calculi became available in the early 1980s; 2 machines were in operation in Ontario by 1989, in Toronto and London.

Until recently, lithotripsy was not available in Ontario east of Toronto. Patients in the Ottawa region were required to travel at their own expense to Toronto, London or Montreal for

treatment. The waiting time for urgent therapy in Montreal was 2 weeks.

In 1996 my colleagues and I applied to the Ontario Ministry of Health and Long-Term Care to make extracorporeal shock-wave lithotripsy available in Ottawa. At that time Ottawa was the largest city in North America without a lithotripsy machine. The ministry refused our request, citing the capital investment to purchase the machine, the ongoing maintenance costs and the fact that Toronto and London could handle the patient load.

Because the ministry's refusal was based primarily on cost, we responded by carefully monitoring the cost of treating Ottawa-area patients with more invasive procedures at the Ottawa Hospital – General Campus. We showed that by offering lithotripsy to just 250 patients per year (of an estimated 700 eligible patients per year from this region) we would in fact save money.

Our greatest concern was that patients in Ottawa were being treated more invasively than other patients in

Ontario because of the lack of local lithotripsy services. Further, it appears that many patients would rather subject themselves to more invasive and risky surgery close to home than travel to another city for less invasive treatment. Although we find this astonishing, we suspect that the situation is similar in other areas of medicine. For hundreds of cancer patients across Canada, travelling to another location is the only way to receive timely treatment.<sup>1</sup> In Toronto, it has been shown that cancer patients faced with the need to travel to obtain radiotherapy prefer to postpone radiotherapy than to endure the hardships of leaving their families and local support.<sup>2</sup>

We presented our findings to the Ontario Ministry of Health and Long-Term Care in the summer of 1997. We also told the ministry staff that Ontario was being charged \$1080 each time a patient from Eastern Ontario was treated with lithotripsy in Montreal.

#### References

1. Priest L. Canada's long wait: "It's a disgrace." *Globe and Mail* 2000 Jan 15; Sect A:15.
2. Priest L. Toronto hospital closes its doors to new cancer patients. *Globe and Mail* 2000 Jan 20.

We estimated that we could provide lithotripsy in Ottawa at half the cost of the transfer payment, reduce waiting times and morbidity, and eliminate almost all of the indirect costs to the patient for travel.

The ministry officials appeared to view our proposal favourably. At their request, we forwarded detailed plans for the lithotripsy unit. We did not receive a formal response from the ministry. With money donated to the Ottawa Hospital Foundation, we purchased a lithotripsy machine in the summer of 1999. We then received a crushing blow: the Ontario Ministry of Health and Long-Term Care informed us that it would not provide funds to operate the machine. Further, the ministry stated that it would deduct from the hospital's global budget any hospital money spent on the delivery of lithotripsy. Lastly, the ministry informed us that it would not allow urologists to bill the Ontario Health Insur-

ance Plan (OHIP) for professional fees for lithotripsy performed in Ottawa. The actions of the Ontario Ministry of Health and Long-Term Care were punitive. We later learned that the ministry also reduced by half the transfer payment for lithotripsy services performed in Quebec. (At least our research saved the Ontario government some money.)

However, after more pressure from politicians and patients, the government has now agreed to fund our lithotripsy machine and I am pleased to report that patients started to receive this therapy in Ottawa in March 2001. I would advise physicians dealing with the Ontario government on funding for new programs to be prepared for a long battle.

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