

used in organ transplant. This was at a time when competing teams such as that in Boston were attempting placement of the kidney in the thigh with a ureterostomy at the knee. In the animal experiments, Murray described the major types of rejection before they were known or named,

and was the first to attempt immunosuppression by chemotherapy or total body irradiation. Dismissal of Murray as a maverick technician or failure to cite his transplant publications cannot be justified.

Murray's contributions to the development of surgery should not be

forgotten. This is a thoughtful biography that surgeons and historians will find rewarding.

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## Correspondence Correspondence

### Tibial plateau fractures

I read with interest Dr. Cameron's letter about tibial plateau fractures (*Can J Surg* 2004;47:149). This is the second time he has written on this subject, with the same conclusion that "tibial plateau fractures seldom progress to total knee replacement unless there are surgical complications."

Although Dr. Cameron refers to a large caseload (3000 cases), I am concerned that there may be a bias. Does Dr. Cameron treat tibial plateau fractures? Has he followed the results of those fractures to see how many have come to a joint replacement? If there are other surgeons in his institution who treat tibial plateau fractures, what are their results for subsequent incidence of total knee replacement? Were his patients carefully and *prospectively* asked if they had ever sustained knee trauma?

If Dr. Cameron does not treat tibial plateau fractures, is it possible that those patients with poor results have their joint replacements performed by the surgeons that treated the original presenting fracture?

It seems that this letter represents informal conclusions from an uncon-

trolled cohort without the benefit of peer review. Can it be misleading? Is it appropriate to publish?

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### (Dr. Cameron replies)

Dr. Driedger is concerned that an uncontrolled cohort study may unintentionally produce bias. I too share his concern and believe that no cohort study provides an answer that could be regarded as being definitive.

To answer some of his specific concerns, only 1 of the "purely" trauma surgeons in my institution does total knee replacements, and the number he does in comparison to those by joint replacement subspecialists is very small, so that I do not think that this is a source of bias. All patients who are going to have joint replacement do have a history taken, and I doubt that a patient would forget having had a tibial plateau fracture.

I do treat tibial plateau fractures, but I do not follow trauma patients over prolonged periods. As it may take 40 years before osteoarthritis is

of sufficient severity to require total knee replacement, such follow-up would be impractical. Even joint replacement patients, whom subspecialists try to see regularly, tend to become lost to follow-up once 10 or 15 years have passed since the index operation. Attempts to find trauma patients from chart review produce such huge losses to follow-up that the results of such studies would be largely meaningless.

I doubt that a couple of decades after the original injury, a patient who develops symptomatic osteoarthritis is likely to return to his or her initial trauma surgeon. It is more likely that such people would turn to a subspecialist joint replacement surgeon.

I am quite prepared to admit that numbers may be somewhat higher than my study suggested, but they still must be surprisingly low.

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