8. Kato R: The influence of experimental arteriovenous fistula on the development of the collateral circulation and on the devascularized limb. Nagoya J Med Sci 1970; 33:55–67

9. Schanzer A, Ciaranello AL, Schanzer H: Brachial artery ligation with total graft excision is a safe and effective approach to prosthetic arteriovenous graft infections. J Vasc Surg 2008; 48:655–8

10. Karmody AM, Lempert N, Jarmolych J: The pathology of post-catheterization brachial artery occlusion. J Surg Res 1976; 20:601–6

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Effect of Spinal *versus* General Anesthesia in Study Comparing Three Methods of Using Local Anesthetics to Achieve Post–knee Arthroplasty Pain

To the Editor:

The authors of a recently published study[1] comparing three local anesthetic methods of reducing post–knee arthroplasty pain recommended spinal anesthesia, but 23% of patients apparently still received general anesthesia. Would the authors be kind enough to share the postoperative pain score data for these two patient groups (*i.e.*, spinal *vs.* general anesthesia)?

Competing Interests

The author declares no competing interests.

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Reference

1. Amundson AW, Johnson RL, Abdel MP, Mantilla CB, Panchamia JK, Taunton MJ, Kralovec ME, Hebl JR, Schroeder DR, Pagnano MW, Kopp SL: A three-arm randomized clinical trial comparing continuous femoral plus single-injection sciatic peripheral nerve blocks *versus* periarticular injection with ropivacaine or liposomal bupivacaine for patients undergoing total knee arthroplasty. Anesthesiology 2017; 126:1139–50

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In Reply:

We thank Dr. Riopelle for his question. In the article,[1] table 2 contains the results of unadjusted comparisons across study arms for all pain endpoints. In addition to these unadjusted comparisons, for the study's primary endpoint an analysis was performed to assess differences across study arms after adjusting for sex, American Society of Anesthesiologists

Table 1. Postoperative Pain According to Study Arm and Type of Anesthetic

Pain Assessment* (Numeric Rating Scale)	Regional	Ropivacaine	Liposomal Bupivacaine
Number of subjects			
General	14	8	14
Spinal	36†	47†	38†
Primary endpoint			
POD 1 (06:00 – 12:00) max pain			
General	3 (1, 4)	3 (2, 5)	5 (3, 5)
Spinal	3 (1, 6)	4 (3, 6)	4 (3, 6)
Secondary endpoints			
POD 0, post-PACU			
Average			
General	0.3 (0.0, 2.4)	2.0 (1.3, 2.7)	3.3 (1.3, 4.1)
Spinal	0.6 (0.0, 2.0)	1.6 (0.7, 2.5)	2.3 (1.0, 2.8)
Maximum			
General	1 (0, 5)	5 (4, 6)	5 (3, 6)
Spinal	2 (0, 4)	4 (2, 6)	5 (4, 6)
POD 1			
Average			
General	2.1 (1.5, 3.3)	2.7 (1.9, 3.5)	4.4 (3.2, 4.8)
Spinal	2.8 (1.2, 4.5)	3.5 (2.6, 4.4)	3.7 (2.9, 4.4)
Maximum			
General	5 (3, 7)	6 (5, 7)	7 (6, 8)
Spinal	6 (3, 8)	6 (5, 7)	6 (5, 8)
POD 2			
Average			
General	2.7 (2.0, 4.0)	2.6 (1.9, 3.9)	3.5 (2.8, 4.2)
Spinal	3.4 (2.0, 4.3)	3.2 (2.5, 4.0)	3.5 (2.6, 4.3)
Maximum			
General	4 (3, 7)	6 (4, 7)	6 (5, 6)
Spinal	6 (4, 7)	6 (4, 7)	5 (4, 7)

*Data are presented as median (25th, 75th). † For POD 2, data are missing for five subjects (one regional group with spinal anesthesia, one ropivacaine group with spinal anesthesia, three liposomal bupivacaine groups with spinal anesthesia).

PACU = postanesthesia care unit; POD = postoperative day.

status, and type of anesthesia. In all cases, the results of the unadjusted and adjusted comparisons across treatment groups were consistent.

Regarding Dr. Riopelle's request for clarification of postoperative pain score data by anesthesia type, table 1 summarizes postoperative pain scores in each treatment arm for patients who received general *versus* spinal anesthesia.

Research Support

Competing Interests

The authors declare no competing interests.