

Results

Use of Local Anesthetics for Intra-articular Injections

by Ronald Karzel, MD

In a recent [Inside AANA](#) newsletter, we published an article by Constance Chu, MD, and Michael O'Malley, MD, discussing laboratory studies about the possibly deleterious effects of intra-articular injections such as Marcaine on chondrocytes. The relevance of these laboratory results clinically for intra-injections of anesthetics remains controversial. We polled the membership regarding their clinical practices and had excellent participation by the members with 332 responses.

Despite the laboratory findings, a large majority of the members (91%) routinely inject local anesthetics when performing an intra-articular corticosteroid injection, and only 6% rarely use them. However, in the operating room, the number of surgeons using intra-articular injections significantly decreases, with only 50% of the surgeons routinely using local anesthetics and 36% using them infrequently. At least among the AANA members responding to the survey, the use of intra-articular pain pumps is minimal, with only two responding members using them frequently and 305 members (99%) using them rarely or never.

For those using intra-articular injections for post-operative pain control, we also asked which anesthetics were chosen. Initial studies focused on the chondrotoxic effects of Marcaine, although additional studies suggest that all of the local anesthetics may affect cartilage viability. Among the membership, Marcaine is still the most widely chosen local anesthetic, used primarily by 54% of the members, followed by ropivacaine (21%) and lidocaine/xylocaine (20%).

The complete survey results are detailed below. Thank you all for your continued contributions to these surveys. The surveys are now available in the newsletter section of the Communities of Practice on the AANA website. I encourage all of you to go the COP site and click on the newsletter community. The article by Dr. Chu and Dr. O'Malley is there for you to review. You can leave comments after the survey and discuss with the other members the reasons for your choices. With enough membership participation, we hope to make this an educational and unique feature of our website.

Use of Local Anesthetics

	Almost Always	Over 75%	25-75%	Less than 25%	Almost Never
When performing an intra-articular injection in the office, how frequently do you inject local anesthetic with the corticosteroid?	84.64%	6.02%	2.71%	1.20%	5.42%
How often do you inject local anesthetics into a joint peri-operatively for post-operative pain control?	40.37%	10.40%	13.76%	8.87%	26.61%
How often do you use an intra-articular pain pump containing local anesthetics for post-operative pain control?	0.0%	0.65%	0.65%	1.62%	97.09%
If you do use an intra-articular injection of local anesthetic for post-operative pain control, how often do you use bupivacaine (Marcaine)?	46.15%	8.06%	7.69%	6.59%	31.50%
If you use an intra-articular injection of local anesthetic for post-operative pain control, how often do you use lidocaine/xylocaine?	15.85%	3.87%	5.99%	14.08%	60.21%
If you use an intra-articular injection of local anesthetic for post-operative pain control, how often do you use ropivacaine?	18.31%	2.46%	3.52%	9.86%	65.85%