

Peripheral Nerve Blocks: A Wise Investment

Gabrielle White, RN, CASC, and Karen Ollila, Newport Beach, Calif.

IF YOU'VE SEEN THE STUDIES showing that single-shot peripheral nerve blocks provide superior post-op pain control, but have been concerned about the cost of adding them, here's good news. In our orthopedic center, an evaluation of 131 shoulder cases with and without single-shot blocks showed excellent clinical results, as expected. With some additional homework, however, we unearthed a bonus finding: Adding a block to a case is essentially free; the net cost of cases with blocks is essentially the same as the net cost of cases without them.

First, the clinical results: Our study showed the pain control provided by blocks to be outstanding. Just 5 percent of patients who received an interscalene block had a pain score >5 at 30 minutes postop, while 36 percent of non-blocked patients had this level of pain. Not one blocked patient had this level of pain at discharge, compared with 10% of non-blocked patients.

But what about the cost? We did a separate, in-depth analysis of 13 blocked and non-blocked shoulder cases to determine the actual expenditures associated with each. We found that in our facility, interscalene blocks required about 5-6 more minutes of pre-surgery anesthesia time, and that the supplies for the blocks cost \$15 to \$16 more per case on average (less than 0.5 percent of the average invoice cost). However, the larger study shows that blocked patients spend significantly less time in post-anesthesia recovery (PAR) and receive fewer post-op narcotics and anti-emetics. Of our 131 shoulder cases, 31 of 53 nonblocked patients (58 percent) required medication in the recovery room and had a PAR stay longer than 60 minutes; just 22 percent of 78 blocked patients met these criteria.

The Pros and Cons of Interscalene Blocks for Shoulder Surgery	
Pros	Cons
Significantly lower pain scores at 30 minutes post-op and at discharge	Required 5-6 additional anesthesia minutes preoperatively*
Far less likely to require narcotics or anti-emetics in PAR	Anesthesia supplies for single-shot blocks cost \$15-16 more
Discharge within 60 minutes 2.5x more likely than for general anesthesia patients	Possibility of transient complications including respiratory distress (rare)
Potential for additional economies with block room and sedation rather than general anesthesia	Possibility of failed/improperly placed blocks
Potential for additional reimbursement when insurers pay for blocks	Occasional complaints of numbness (pre-op education is important)

*A skilled anesthesiologist is required to ensure successful, efficient blocks. Abnormal anatomy can prolong block time.

Although blocks cost slightly more up front, non-blocked cases cost more in PAR time and post-op analgesics.

Centers that do blocks differently might achieve even better economic results. We administer general anesthesia to all patients undergoing significant shoulder procedures, although blocked patients receive a lighter regimen. Centers that use sedation might experience even faster post-op emergence. We also administer our blocks in the OR. In a center that has a dedicated block room, well-performed blocks may reduce costs even further.

Also, Medicare's new coding schedule for 2008 includes many new codes for peripheral nerve blocks, with facility reimbursements starting at \$48. We did not include the impact of such reimbursements in our analysis.

It's true that blocks are not perfect. Some blocks fail, and a few result in transient complications like temporary

inhibition of respiratory function and numbness. In our experience, significant complications are rare and should be balanced with the consequences of a traditional general anesthesia regimen as well as surgeon and patient preferences.

In a time of rising health care costs, it's rare to find items that significantly improve care at no extra cost. On behalf of our patients, it's a bargain we'll take every time.

Ms. White is Administrator and Ms. Ollila is Project Manager of the Orthopedic Surgery Center of Orange County, Newport Beach, Calif.

The views expressed in this advertorial are those of the author only. Providers and clinicians are obligated to make their own determination of the appropriate medical treatment for each of their patients.

Brought to you as an educational service by

B|BRAUN
SHARING EXPERTISE