

Title: Brachial plexus blockade versus general anesthesia for orthopedic operation on the upper extremity in outpatients.

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Regional anesthesia has been discouraged for outpatients (OP) procedures but is routinely performed in our institution. We compared general anesthesia (GA) to brachial plexus block (BPB) for upper extremity (UE) procedures on OPs.

After approval of the Institutional Review Board, we reviewed the anesthesia, operating room (OR), recovery room (RR), and OP records in all adult OPs undergoing orthopedic procedures on UE. Age, sex, ASA classification and OR and RR complications were recorded. Narcotic use, nausea and vomiting (N/V) and time spent in OR, RR, and OP were also recorded. Follow-up was made one to three days after discharge. Unpaired t-tests and Yates correction of chi square tests were used where appropriate.

Table 1 summarizes results for 276 patients. Patients who received BPB were older, more often women, and were less likely to require narcotics postoperatively.

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Title: Regional versus general anesthesia in outpatients.

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Regional anesthesia (RA) has been discouraged for outpatient (OP) surgery because of a reputation for prolonged administration and recovery times. We compared general anesthesia (GA) to RA in adult OPs.

After approval of the Institutional Review Board, we reviewed the anesthesia, operating room (OR), recovery room (RR) and OP records of 1,037 adults. Age, sex, ASA classification, narcotic use, nausea and vomiting (N/V) and OR, RR, and OP times were recorded. Follow-up was attempted 1-3 days postop. Unpaired t-tests and Yates correction of chi square were used.

Tables summarize the results. RA patients required less narcotics postoperatively, had less N/V, and were more often male.

Follow-up was successful in 70% of patients. Post dural puncture headache occurred in 5% of the patients who received spinal anesthesia. Epidural blood patch was performed in 40% of these patients. Pain

Follow-up was successful in 73% of patients. Pain at the injection site was the most common complaint in the BPB group. Sore throat was the most common complaint in the GA group.

Our data fail to support increased recovery time when BPB is used for OP UE orthopedic procedures. The need for postoperative narcotics was less in the BPB group even though all patients had sensation prior to discharge from OP.

| Table 1 | BPB | GA |
|--------------------|---------|---------|
| Patients # | 234 | 42 |
| Sex (% female) * | 57% | 48% |
| Age (yrs) * | 46+17 | 35+12 |
| ASA | 1.9+0.8 | 1.7+0.8 |
| OR Narcotics ** | 53% | 76% |
| RR Narcotics *** | 3% | 45% |
| OP Narcotics | 21% | 19% |
| Total Narcotics ** | 19% | 58% |
| RR N/V | 2.1% | 7.1% |
| OP N/V | 2.1% | 7.1 |
| OR Time (min) | 89+36 | 100+31 |
| RR Time (min) | 88+44 | 101+49 |
| OP Time (min) | 74+33 | 67+22 |
| Total Time (min) | 161+53 | 168+52 |

* P < .05 compared to GA
 ** P < .01 compared to GA
 *** P < .001 compared to GA

at the injection site (4% incidence) was the most common complaint in the RA group. Sore throat (4.5% incidence) was the most common complaint in the GA group.

Our data fail to show increased total postop time when RA is used for OP procedures. The need for postop narcotics is less in the RA group even though all patients had intact sensation prior to discharge.

| Table 1 | Types of RA (N=618) |
|-----------------------|---------------------|
| Subarachnoid | 51% |
| Epidural | 2% |
| Brachial Plexus Block | 42% |
| Misc. | 5% |

| Table 2 | Results | RA | GA |
|-------------------|---------|--------|---------|
| Patients (#) | | 618 | 419 |
| Sex (% female) ** | | 57% | 66% |
| Age(yrs) | | 46+17 | 33+13 |
| ASA class | | 2+0.8 | 1.6+0.7 |
| OR narcotics * | | 56% | 62% |
| RR narcotics ** | | 8.1% | 26% |
| OP narcotics | | 11.8% | 9.3% |
| Total narcotics * | | 15% | 29% |
| RR N/V ** | | 2.1% | 15.3% |
| OP N/V ** | | 2.1% | 12.2% |
| OR Time (min) | | 88+40 | 84+40 |
| RR Time (min) | | 123+66 | 98+64 |
| OP Time (min) | | 66+35 | 74+41 |
| Total Time (min) | | 191+71 | 167+61 |

* p < .01 compared to GA
 ** p < .005 compared to GA