Regional Anesthesia Teaching Program

Educational Goals:

The following is the minimal clinical experience in regional anesthesia which is required by the Residency Review Committee (RRC) by completion of a residency program in anesthesia.

- 50 epidural anesthetics for patients undergoing surgical procedures, including cesarean sections.
- 50 subarachnoid blocks performed on patients undergoing surgical procedures, including cesarean sections.
- 40 peripheral nerve blocks for patients undergoing surgical procedures.

In addition to the above, residents will be expected to reach the following objectives:

CA-1 Year

Residents should be familiar with:

1. Pharmacology of local anesthetics
2. Anatomy of cervical, brachial, and lumbar plexi, the spine, intercostals nerves, and other upper and lower extremity nerves of importance in regional anesthesia.
3. Indications and contraindications of regional anesthesia for the appropriate surgical procedures.
4. Preparation involved (preoperative evaluation, equipment, sterile technique).
5. Complications of regional anesthesia (recognition and treatment)
6. Clinical experience with the following:
   - 15 non-obstetric epidurals (lumbar, thoracic or cervical)
   - 15 non-obstetric spinals
   - 20 (total) out of the following peripheral nerve blocks for surgical procedures:
     - Axillary brachial plexus block
Interscalene brachial plexus
Supraclavicular brachial plexus
Infraclavicular brachial plexus
Cervical plexus block
Bier bloc
Femoral (3-in-1) block
Sciatic nerve block
Popliteal nerve block
Ankle block
Saphenous nerve block
Lateral femoral cutaneous / fascia-iliaca
Obturator nerve
Intercostal nerve block
“rescue” techniques for upper extremities
“rescue” techniques for lower extremities

It is not necessary for residents to have performed every block on this list but they should be familiar with the anatomy, indications, contraindications and complications of each block.

**CA-2 Year**

Residents should become familiar with techniques and does involved in regional anesthesia, building on knowledge gained in the CA-1 year. CA-2 residents are expected to have the following clinical experience as a minimum:

- 10 non-obstetric epidurals (lumbar, thoracic or cervical)
- 10 non-obstetric spinals
- 10 peripheral nerve blocks for surgical procedures

**CA-3 Year**

Residents should continue to gain experience with techniques learned in CA-1 and CA-2 years and in addition should be able to teach a CA-1 resident the basic regional techniques expected of them.

CA-3 residents who have not performed 40 peripheral nerve blocks for surgical procedures in their CA-1 and CA-2 years will be expected to complete this requirement in their CA-3 year.

**Resident Evaluation**
Evaluation of resident technical skills and judgement will be by direct observation by supervising attending anesthesiologists. A verbal evaluation of residents successful attainment of the educational goals as outlined above will be obtained every six months for CA-1 and CA-2 residents. Numbers of procedures performed by residents will be reviewed using the departmental tracking form. Reviews and evaluations will be done by co-directors of the Regional Resource group as listed below. The results will in writing and will be reviewed with residents before placement in their files. Residents who have failed to meet the required number of procedures in their CA-1 year will be assigned more regional cases during their CA-2 year. Residents how fail to meet expectations as outlined under educational goals during their evaluations, will be allowed a retest by a different attending anesthesiologist one month after their failed evaluation. If the evaluation is unsatisfactory a second time, this will be brought to the attention of the Residency Education Committee for further action.

**Reading List**

By the end of the CA-1 year all residents should have mastered the material in a standard textbook of anesthesia pertinent to regional anesthesia. This would include the chapters on patient preoperative evaluation, preparation for anesthesia, pharmacology of local anesthetics, anatomy, and techniques of regional anesthesia. By the end of the CA-2 year all residents should have mastered the material in a accepted textbook of regional anesthesia that discusses these areas in more depth and includes indications and contraindications, rationales for choosing a specific block, complications, and management.

Suggested Readings:

- *Neural Blockade* edited by M.J. Cousins, P.O. Bridenbaugh Philadelphia PA,