



**Military Advanced Regional Anesthesia & Analgesia (MARAA)**  
Fall 2006 Meeting  
Minutes\*

*\*MARAA decisions and recommendations to service Anesthesiology Consultants to the Surgeons General can be found under the heading: Service Anesthesiology consultant recommendations.*

**I. ATTENDANCE/OPENING REMARKS**

Meeting Date: 13 October 2006, 1700-1900  
Meeting Location: Palmer House Hilton, Chicago, IL

Voting Members in attendance:

- |  |  |
|--|--|
| 1. LTC Chester Buckenmaier – Army <sup>2,3</sup> | <a href="mailto:chester.buckenmaier@na.amedd.army.mil">chester.buckenmaier@na.amedd.army.mil</a> |
| 2. MAJ Scott Croll – Army <sup>2</sup>           | <a href="mailto:scott.croll@na.amedd.army.mil">scott.croll@na.amedd.army.mil</a>                 |
| 3. Lt Col Todd Carter – Air Force <sup>1</sup>   | <a href="mailto:todd.carter@andrews.af.mil">todd.carter@andrews.af.mil</a>                       |
| 4. Maj Chris Wentzel - Air Force <sup>2</sup>    | <a href="mailto:chris.wentzel@andrews.af.mil">chris.wentzel@andrews.af.mil</a>                   |
| 5. CAPT Ivan Lesnik – Navy <sup>1</sup>          | <a href="mailto:ilesnik@usuhs.mil">ilesnik@usuhs.mil</a>   |
| 6. LTC Debra Clise – Army <sup>2</sup>           | <a href="mailto:debra.clise@na.amedd.army.mil">debra.clise@na.amedd.army.mil</a>                 |
| 7. CDR Andrew Biegner – Navy <sup>2</sup>        | <a href="mailto:arbiegner@nmcsd.med.navy.mil">arbiegner@nmcsd.med.navy.mil</a>                   |

Voting Members absent:

- |  |  |
|--|--|
| 8. LCDR Dean Giacobbe – Navy <sup>2</sup>        | <a href="mailto:dtgiacobbe@mar.med.navy.mil">dtgiacobbe@mar.med.navy.mil</a>         |
| 9. Maj Katherine Ponton – Air Force <sup>2</sup> | <a href="mailto:katherine.ponton@langley.af.mil">katherine.ponton@langley.af.mil</a> |

Other Attendees (listed as signed in)

- |                                |            |
|--------------------------------|------------|
| 10. Surg Capt Charley Johnston | Royal Navy |
| 11. COL Kenneth Harris         | Army       |
| 12. COL Paul Mongan            | Army       |
| 13. LTC David Longenecker      | Army       |
| 14. LTC Cynthia Shields        | Army       |
| 15. MAJ Scott Griffith         | Army       |
| 16. MAJ John Hamel             | Army       |
| 17. MAJ Ron Oberfoel           | Army       |

18. MAJ Sean Shockey	Army
19. MAJ Thomas Webber	Army
20. CPT Gregory Applegate	Army
21. CPT Elizabeth Javernick	Army
22. COL(R) John Chiles	Army / Retired
23. LTC Rocky Reston	Air Force
24. MAJ Donald Osborn	Air Force
25. CDR Darin Via	Navy
26. Capt Bruce Laverty	Navy
27. CDR Patrick Boyle	Navy
28. CDR John Shapiro	Navy
29. Scott Gustafson	Civilian / Sorenson
30. Geselle McKnight, CRNA	ARAPMI
31. Kelly Kiser	ARAPMI
32. CPT Brian McMillan	Army / Fellow

<sup>1</sup>Service Consultant

<sup>2</sup>Service Consultant's Designee

<sup>3</sup>MARAA President

## II. 2006-2007 MARAA Members & MARAA President

a. Slide Presentation & Opening Remarks by LTC Buckenmaier. MARAA's purpose and function was outlined for the audience and

b. Buckenmaier introduced current MARAA consultants (see above) to the group.

b. Vote for MARAA President. Carter nominated Buckenmaier, seconded by Lesnik.

**Service anesthesiology consultant recommendation:** Dr. Buckenmaier will serve as President for one more year.

## III. OLD Business / Review of Previous Minutes:

a. Both continuous peripheral nerve block (CPNB) and patient controlled analgesia (PCA) are successful programs brought about by MARAA. Review program for additional ongoing implementation issues.

- Only epidurals infusing local anesthetic approved for air transport
- Under-dosing occurring with PCA's. The Air force is having a problem with PCA's being turned off and just bolusing. Dr. Carter is working on this issue.
- All instructions are available at [www.arapmi.org](http://www.arapmi.org).
  - Dr. Chiles suggested updating templates,
  - Dr. Buckenmaier suggested an updated set of guidelines for epidurals (add to website),
  - Dr. Vie suggested a two-page information sheet that the consultants could use to get the word out as well as developing an educational component (i.e. training movie)
- Prepare predeployment packets and/or CD-ROM for training. Same information as listed on ARAPMI website.
- Dr. Lesnik asked about the number of PCA's coming from theater. Dr. Buckenmaier collecting as much data as possible. Some recent statistics are provided.

RATS data on AE pain pumps

Month/Yr <i>Blue = current</i>	PCA (IV) <b>only</b>	Epidural (PCEA) <b>only</b>	Catheter (CPNB) <b>only</b>
Jan 2006	11	1	10
Feb 2006	11	1	14
March 2006	4	1	13
April 2006	20	1	6
May 2006	15	1	6
June 2006	15	2	3
July 2006	26	0	10
Aug 2006	27	1	7
Sept. 2006	16	1	8
<b>Oct. 2006</b>	<b>57</b>	<b>1</b>	<b>5</b>

- Scott Gustafson, Sorenson, stated that they frequently get calls from theater requesting extra PCA cases. Recommended sites order more containers/cases to transport with pump.

**Service anesthesiology consultant recommendation:** Increased emphasis will be applied in the distribution and advertising of these training programs in the AE system, Combat Support Hospitals, and at Landstuhl. Existing training programs will be added to the Army Regional Anesthesia & Pain Management Initiative web site ([www.arapmi.org](http://www.arapmi.org)) which will be linked to RATS. Consultants should ensure that this material is reviewed by all deploying anesthesia personnel. Consultants should also request that all deploying anesthesia personnel establish RATS system accounts.

b. Regional Anesthesia Tracking System (RATS) update.

1. Stress that providers must register for RATS.
2. Imperative - Patient information must be entered correctly.

**Service anesthesiology consultant recommendation:** Consultants should emphasize the importance of timely and accurate RATS information entry to enhance communication and safety of acute pain management efforts in our wounded.

c. Should other drugs or medications be recommended as part of PCA infusions or given prior to air evacuation?

- Alternating of medications such as Tylenol, Methadone, etc., Dr. Carter stated that AE keeps the meds bracketed within very safe parameters.
- Ketamine use? Dr. Carter stated that the Air Force is resistant but that someone should work to develop policy/guidelines for the implementation of Ketamine or other medications (Dilaudid) into the AE system.
- Dr. Buckenmaier stated that MARAA needs to explore other more established pain medications before exploring new, untested medications.
- Dr. Vie stated acute pain services should be established in CONUS military facilities before changes can be made in the field.
- Dr. Carter questioned regime for oral medications.
- Dr. Lesnik inquired about breakthrough pain with PCA's. Comments included increasing dosage before putting on air craft or do we (MARAA) want to recommend other meds...?

- CDR Beigner stated it's hard to deal with different medications on different PCA's, that it's challenging for support staff.
- Dr. Buckenmaier brought up pain in austere environments and the administration of medications.

**Service anesthesiology consultant recommendation:** See New Business 'a'.

d. ROAR (Regional Outcomes Anesthesia Reporting) database is designed to track complications. All providers are encouraged to use. Available through [www.arapmi.org](http://www.arapmi.org) or at <https://rats.cermusa.org>

#### IV. NEW Business:

a. Pain practice protocols. Is there a need? Who will produce them? How will the information be distributed?

- MARAA will develop standard guidelines on website regarding the use of multiple medications, perhaps a check sheet for guidelines of care before loading patients on planes for transport.
- Dr. Buckenmaier will develop protocol and forward to consultants for input / finalization by next MARAA meeting in April 2007.
  - Dr. Croll mentioned VTC meetings from Baghdad. MARAA needs to be involved for a number of reasons but also for help in development of protocols.

**Service anesthesiology consultant recommendation:** Following MARAA development of the first standard acute pain guidelines for military medicine, consultants should work to integrate these guidelines within their respective medical systems.

b. Acute pain service (APS) support is needed farther forward.

- Dr. Carter suggested sending people from LRMC to Balad to give in-services.
- Need Nurse Pain Case Manager to communicate information to ward nurses.
- Dr. Lesnik noted that much further discussion would need to take place before proceeding to place APS in theatre.
- LTC Clise wanted to make sure that CRNA's are included in all aspects of planning, training and education for APS.

**Service anesthesiology consultant recommendation:** Consultants support putting a Nurse (APS) in place initially at LRMC with the long range plan of incorporating to theatre.

c. Military Advanced Regional Anesthesia and Analgesia Field Manual. Supplement to the Emergency War Surgery manual.

- Dr. Buckenmaier stated the manual should be Tri-Service and asked for contributors from MARAA.
- Working with Wix Pix to provide CD with supplement.
- Outline for the Manual is provided in Appendix A.

d. Military Regional Anesthesia Survey completed.

#### V. NEXT MEETING:

The next MARAA meeting will be held in conjunction with the Spring 2007 American Society of Regional Anesthesia and Pain Medicine (ASRA) meeting in Vancouver, British Columbia, Canada, April 2007.

## Appendix A

### Military Advanced Regional Anesthesia and Analgesia Field Manual

#### Dedication

1. Introduction – History and scope. Intentions for use.
2. Peripheral Nerve Block Equipment
  - a. Needles
  - b. Stimulators
  - c. Catheters – Stimulating/non-stimulating
  - d. Ultrasound
  - e. Infusion pumps
  - d. Monitors
3. Local Anesthetics
  - a. Ropivacaine
  - b. Bupivacaine
  - c. Mepivacaine
  - d. Lidocaine
  - e. Adjuncts
    - I. Clonidine
    - II. Epinephrine
    - III. Intralipid
    - IV. Fentanyl
    - V. Versed
4. Nerve Stimulation and Ultrasound Theory
5. Upper Extremity Neuroanatomy
  - a. Cervical plexus
  - b. Brachial plexus
6. Cervical plexus
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
7. Interscalene
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
8. Supraclavicular
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound

9. Infraclavicular
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
10. Axillary
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
11. Individual nerve blocks of the upper extremity
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
12. Paravertebral
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
13. Lower Extremity Neuroanatomy
  - a. Lumbar Plexus
  - b. Sacral Plexus
  
14. Lumbar Plexus
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
15. Femoral
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
16. Individual nerve blocks of the lumbar plexus
  - a. LFC
  - b. Obturator
  
17. Posterior Approach to the Sciatic Nerve
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  - d. Raj

18. Anterior Approach to the Sciatic Nerve
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
19. Lateral Approach to the Sciatic Nerve
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
20. Popliteal
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
21. Saphenous
  - a. Anatomy
  - b. Block
  - c. Block with ultrasound
  
22. Ankle block
  - a. Anatomy
  - b. Block
  
23. Bier Block
  
24. Catheter placement and management
  - a. Tunneling
  
25. Regional anesthesia complications
  - a. Local anesthetic toxicity
  - b. Nerve damage
  - c. Intravascular injection
  - d. Intrathecal injection
  - e. Failed block
  - f. Infection
  
26. Acute pain management in the field
  - a. Opioids
  - b. NMDA receptor antagonists
  - c.  $\alpha$ -2 antagonists
  - d. NSAIDS
  - e. Anti-convulsants
  - f. Anti-psychotics

References