SOAP 2006
Pre-Meeting Newsletter
38th Annual Meeting
April 26-30, 2006
The Westin Diplomat Resort & Spa
Hollywood, Florida

Pre-registration is available through March 27, 2006.
**Scientific Program**

**WEDNESDAY, APRIL 26, 2006**

1:00 - 5:00 pm  **Critical Care Obstetric Anesthesia Workshop**  
(By Ticket Only – Limited Registration)  
Gurinder M. S. Vasdev, MD; et al.

6:00 - 8:00 pm  **SOAP Opening Reception**

**THURSDAY, APRIL 27, 2006**

7:00 - 7:45 am  **Breakfast with Exhibitors; Posters**

7:45 - 8:00 am  **Opening Remarks and Welcome**  
William R. Camann, MD; David J. Wlody, MD; David J. Birnbach, MD; Jose Carvalho, MD, PhD; Gurinder M. S. Vasdev, MD; et al.

8:00 - 9:30 am  **Gertie Marx Symposium (6)**  
Moderator: G. M. Bassell, MD  
Judges: Stephen Halpern, MD; Philip Hess, MD; Alan Santos, MD, MPH; Jonathan Waters, MD; Jess Weiss, MD

9:30 - 9:45 am  **Distinguished Service Award**  
Awarded to Felicity Reynolds, MD  
Presenter: William R. Camann, MD

9:45 - 10:15 am  **Coffee with Exhibitors; Posters**

10:15 - 11:30 am  **Oral Presentations (5)**  
Moderator: Linda S. Polley, MD

11:30 - 12:30 pm  **PRO/CON Debate: A Non-Particulate Antacid Should be Used Routinely in All Patients Undergoing Cesarean Section**  
Moderator: David J. Wlody, MD  
Pro: Yaakov Beilin, MD  
Con: Jose Carvalho, MD, PhD, FRCPC

12:30 - 1:30 pm  **Lunch with Exhibitors; Posters**

1:30 - 2:30 pm  **What’s New in Obstetrics?**  
Introduction: David J. Wlody, MD  
Howard Minkoff, MD

2:30 - 3:30 pm  **Zuspan Award Symposium (4)**  
Moderator: M. Joanne Douglas, MD, FRCP  
Judges: Samuel Hughes, MD; Barbara Leighton, MD; Howard Minkoff, MD; Shiv Sharma, MD

3:30 - 4:00 pm  **Coffee Break with Exhibitors; Posters**

4:00 - 6:00 pm  **SOAP Business Meeting – Awards Presentations**  
Moderator: William R. Camann, MD

**FRIDAY, APRIL 28, 2006**

6:00 - 7:00 am  **Fun Run/Walk**

7:00 - 8:00 am  **Breakfast with Exhibitors; Posters**

8:00 - 9:00 am  **Oral Presentations (4)**  
Moderator: Barbara Scavone, MD

9:00 - 10:00 am  **Obstetric Medicine Update: Endocrine Disease in Pregnancy**  
Introduction: Joy L. Hawkins, MD  
Erin Joanne Keely, MD, FRCPC

10:00 - 10:30 am  **Coffee with Exhibitors; Posters**

10:30 - 11:30 am  **Poster Review #1 – Moderator: Cynthia Wong, MD**

11:30 - 1:00 pm  **Panel: Team Training in Obstetrics**  
Moderator: Stephen Pratt, MD  
Panelists: Paul Preston, MD; Benjamin Sachs, MD; TBD

1:30 pm  **SOAP Golf and Tennis Activities**

**SATURDAY, APRIL 29, 2006**

7:00 - 8:00 am  **Breakfast with the Experts**  
Moderator: Robert Gaiser, MD  
Experts: Jodie Buxbaum, MD; Jose Carvalho, MD, PhD, FRCPC; Regina Fragneto, MD; David Hepner, MD (Spanish); Bupesh Kaul, MD; Gordon Lyons, FRCA; Edward McGongal, MD; Mary McHugh, MD; Deborah Qualey, MD; Jayanthie Ranasinghe, MD; Edward Riley, MD; Gurinder M. S. Vasdev, MD; Lela Weems, MD

7:00 - 8:00 am  **Continental Breakfast; Posters**

8:15 - 9:15 am  **Gerard W. Ostheimer Lecture: What’s New in OB Anesthesia?**  
Introduction: Brenda Bucklin, MD  
Roshan Fernando, FRCA

9:15 - 9:45 am  **Coffee Break; Posters**

9:45 - 10:45 am  **Poster Review #2 – Moderator: Edward Riley, MD**

10:45 - 11:45 am  **Fred Hehre Lecture: Lessons Learned from Obstetric Anesthesia**  
Introduction: William R. Camann, MD  
David Chestnut, MD

11:45 - 1:00 pm  **Lunch (On Your Own)**

1:00 - 2:30 pm  **Best Paper Presentations (6)**  
Moderator: Gordon Lyons, MD  
Judges: William R. Camann, MD; Prof. Warwick Ngan Kee; Kiki Palacios, MD; Richard Smiley, MD, PhD

2:30 - 4:00 pm  **Panel: Obstetric Anesthesia and Coexisting Diseases**  
Moderator: Richard Wissler, MD, PhD  
Panelists: Brendan Carvalho, MB, BCh; Manuel Vallejo, DMD, MD; Richard Wissler, MD, PhD

4:00 - 5:00 pm  **Open Forum: Proposed Revisions to the ASA Practice Guidelines on Obstetric Anesthesia**

6:00 - 11:00 pm  **SOAP Banquet**

**SUNDAY, APRIL 30, 2006**

7:00 - 7:30 am  **Continental Breakfast**

7:30 - 8:30 am  **Panel: Tort Reform**  
Moderator: Donald Penning, MD, MSC, FRCPC  
Panelists: Patricia Dailey, MD; Andrew Harris, MD, MHS; A. Terry Walman, MD, JD

8:30 - 9:30 am  **PRO/CON Debate: Supplemental Oxygen Should Be Used Routinely During Cesarean Section**  
Moderator: David J. Birnbach, MD  
Pro: Scott Segal, MD  
Con: Prof. Warwick Ngan Kee

9:30 - 10:30 am  **Poster Case Reports: You Did What? The Best Case Reports of the Year!**  
Moderator: Robert McKay, MD

10:30 am  **Adjournment**
Greetings to all!

I hope by now all of us in the north have seen the last flakes of snow, and for everyone else in more temperate climes, I hope it’s been a great winter. I’m looking forward to seeing everyone in the friendliest climate of all – Hollywood, Florida at the next annual SOAP meeting, April 26-30. We have a terrific program planned, and this should be yet one more memorable annual meeting of our great society.

The Practice Guidelines for Obstetric Anesthesia are one of the most important documents the ASA produces for our specialty. We, as SOAP members, should feel a strong connection to this document; for all practical purposes, we are creating it.

One event that is planned for the annual meeting will be an open forum to discuss the revision of the ASA Practice Guidelines for Obstetric Anesthesia. This will take place during the Research Hour on Saturday afternoon, April 29. This document, first published in 1999 (Anesthesiology 1999;90: 600-11), and sponsored by the American Society of Anesthesiologists, is one of the most important documents the ASA produces for our specialty. This is the collective wisdom of our opinion leaders on what constitutes reasonable practice of obstetric anesthesia. Although officially an ASA document, the task force is comprised of SOAP members and the input of SOAP is vital. We, as SOAP members, should feel a strong connection to this document; for all practical purposes, we are creating it. This collaboration between ASA and SOAP underscores the strong bond between our respective societies. The goal of the task force preparing this is to make as many of the recommendations as “evidence-based” as possible. Where evidence is lacking or conflicting, the recommendations will be based to a great extent on expert opinion and open forum commentary. This is where your input is crucial! Please take a look at the current guidelines, (a draft version will also be available at the SOAP meeting) and think about what you might like added or changed. Come to the open forum and express your opinion. Member input is essential, and we rely on the insight of our members to make this as inclusive a document as possible. These guidelines are meant to be applicable to all practices; private and academic, rural and urban, large and small – one size fits all is part of the challenge of this exercise. The task force hopes to have the document in a final form for consideration for full approval of the ASA House of Delegates at the 2006 ASA annual meeting in Chicago.

I’ll give a few examples of some of the proposed additions that our hard-working task force has already considered. a) A strong recommendation to consider early epidural placement in certain high risk-obstetric patients, b) A recommendation to utilize pencil point needles whenever possible for spinal anesthesia in pregnant patients (we are mostly doing this now anyway, right?), c) An endorsement to use the laryngeal mask airway as a critical and early modality in the setting of a difficult or failed airway in obstetrics, and d) A statement that the use of concentrations of bupivacaine greater than 0.125% for labor analgesia is unnecessary. And more to come – give us your thoughts!

One of the more challenging issues we all face as physicians is the advent of “pay for performance”, also known as P4P. How would P4P be implemented in obstetric anesthesia? What practices in obstetric anesthesia should be incentivized to improve the specialty? What performance measures would be appropriate to utilize as benchmarks of our practice, particularly if payment were on the line? Can and should...
P4P be linked to the ASA Practice Guidelines for Obstetric Anesthesia? Think about this, because we will all have to deal with this in the coming years.

I love the interpersonal interactions so unique to the world of childbirth. I love the largely unscheduled nature of obstetrics. I love the privilege of being involved in a meaningful way in the one of the greatest events in a woman's life. So, what do YOU love about obstetric anesthesia?

On another topic, I’d like to take this opportunity to pose a few questions to the membership. I was intrigued a few days ago when a colleague of mine and I were chatting; he was lamenting the incredible “performance pressure” he noted when working in the main operating room. The pressure to go faster, to turn over rooms faster, to do more and more in less and less time was, in his opinion, and I concur, placing undue emotional and physical demands on him, and possibly even affecting patient safety. Then he asked me an interesting question – do we see this same kind of pressure in obstetric anesthesia? My answer (and I preface this by saying this is my own personal experience at my own hospital, and as they say – your mileage may vary!) was no. Certainly, we are incredibly busy on the obstetric unit. We sometimes are so busy we feel like it’s a bit of a controlled, or even uncontrolled, chaos. But is it the same kind of “performance” pressure we experience in the general operating room? In my opinion, it’s very different. The pressure to turn over rooms, to just get the next case done, the seemingly endless list of “add-ons”, the deification of the “schedule” and the endless explaining if a case is “delayed” – these are not the same kinds of pressures we are used to in the obstetric arena. We certainly have our own set of pressures when working on the labor & delivery unit. But for most of us, I would venture to say that we love these pressures. This is what makes us obstetric anesthesiologists. Speaking for myself, I love the interpersonal interactions so unique to the world of childbirth. I love the largely unscheduled nature of obstetrics. I love the privilege of being involved in a meaningful way in the one of the greatest events in a woman’s life.

So, what do you love about obstetric anesthesia? Why do you enjoy the work on the L&D unit more than the general operating room? Why do you attend SOAP meetings? We all may have unique perspectives and thoughts on this, but in the end, I think the answers to these questions will have a common theme for most of the membership of SOAP. It’s what makes this specialty so much fun, so unique and so special. It’s been a pleasure and an honor to serve as your president for this past year, and I look forward to many more years of service to this society and specialty.

Best wishes to all,
William Camann, MD

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Treasurer’s Report

As most of you know, SOAP’s fiscal year ends on October 31st. Although it is a couple months past that date, audits take time and our firm has not completed its audit at the time of this writing. Therefore, my report will not give specific figures but rather approximates. I doubt there will be much variance in the bottom line when all is said. However, at our annual business meeting I will present our finances using the audited figures as well as project on our financial health. I will publish that report in the summer post-meeting newsletter.

OPERATIONS: Although we came in under budget in administrative income, we also came in under budget in all our operating and societal expenses so that the net effect was a gain of about $10,000. Our major loss of income was at the membership level. We grossed about $13,000 less in dues income than was budgeted. This was partially offset by a significant increase in the OAPEF contributions. On the expense side, we saw the most significant reduction in the newsletter expenses, largely because of improved technology. However, membership expenses, board and committee expenses as well as administrative expenses all came in well under budget.

ANNUAL MEETING: Once again, we did well at this year’s annual meeting. Although our income was about $9000 under budget, our expenses were about $29,000 under budget, giving us a net gain of about $20,000. Registration came in at about what was expected. Our revenue losers were in the food and entertainment category. As for expenses, the cost for our online abstract process was cut in half, giving us a $10,000 break, and syllabus, printing and postage were also significantly reduced.

INVESTMENTS: Our total investment income (i.e., investment gains plus dividend income) gained about $51,000. As we had budgeted for a gain of only $25,000, this is significant. Also, this does not include the interest revenue we will be receiving from Dr. Marx’s estate. That will be reflected in the current fiscal year, and I will remark on that at the business meeting.

SUMMARY: Our bottom line is that we saw a significant gain of about $9000 over our budgeted revenue this year and an approximate reduction of about $48,000 in budgeted expenses. Before you get all excited, remember that a significant portion of that gain is paper, but our net worth has increased by about 10%.

I look forward to reporting the specifics at the business meeting in Miami in April and to responding to any questions you may have.

Respectfully submitted,
Cally Hoyt, MD, MBA
The Research Committee of SOAP presents this column in an effort to assist members in conducting and evaluating research, stimulating ideas and conversations, and expanding the scope of obstetric anesthesia. If you have ideas, suggestions, or questions for future topics, please write, phone, fax, or E-mail me:

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The CONSORT Checklist

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Properly designed randomized controlled trials (RCT’s) are an essential component of clinical research. Unfortunately, poorly designed trials can lead to biased conclusions and may lead to poor treatment choices. Further, if key information about the study design is missing, electronic databases such as MEDLINE and EMBASE will fail to correctly index the study. It is therefore important to report key aspects of the study design and implementation so that clinicians can access the trial and judge its quality. The Consolidated Standards for Reporting of Trials (CONSORT) group met to determine which aspects were important in these respects. Their first report appeared in 1996 and was revised in 2001.

The group designed a checklist with 22 items. The complete checklist can be found at:

http://www.consort-statement.org/newene.htm#checklist

In addition to the actual items, this site explains the rationale for each item and contains examples of how it is properly used. For the purposes of this article, I will concentrate on a few of the more important aspects of the checklist.

The Checklist

Title and Abstract: The words “random allocation” or “randomized” must appear in the title or abstract. This is to ensure that the article is properly indexed under randomized controlled trials in MEDLINE.

Methods: The methods section must contain a description of the participants that allows clinicians to compare those in the study to their own patients. This includes description of the important demographic features and the setting (e.g. primary vs. tertiary care, when the study was performed).

The method of randomization must be fully explained. The description should include how the random sequence was generated. Restrictions such as block randomization or stratification should be included.

There is a separate item for blinding of allocation. This describes how the person who recruits the participants is blinded to treatment group (opaque envelopes, telephone randomization etc). It is important to blind allocation to avoid recruitment bias. Some methods used to blind allocation are more easily circumvented (sealed envelopes) than others (telephone randomization). Blinding allocation is different from blinding, or masking, the treatment itself (which should also be done if possible). If one considers a clinical trial that compares epidural analgesia to parenteral opioid, it is possible to conceal allocation of treatment until the patient requests analgesia. Once the analgesic has been assigned, the treatment is no longer blinded. This hypothetical trial can be randomized, the allocation can be concealed, but the trial cannot be blinded. Conversely, if epidural ropivacaine is compared to epidural bupivacaine for labor analgesia, it is possible to maintain blinding of allocation to group as well as the treatment received until after the trial is over. The terms ‘single blind’, ‘double blind’ and even ‘triple blind’ have been used to describe clinical trials. Practically, it is best to explicitly state who was blinded (patient, nurse, pediatrician, statistician, etc.) rather than use the terms above.

The methods should include a detailed description of the statistical methodology. This includes a full description of the sample size estimate, a statement of the primary and secondary outcomes, and a description of special considerations such as pre-planned subgroup analyses and adjusted analyses.

Results: One of the main features of the consort checklist is a description of the flow of participants from the beginning to the end of the trial. This includes the number of patients who were eligible, randomized, treated, followed and analyzed. Often, the most effective way of showing this is with a flow diagram. Figure 1 illustrates a hypothetical flow diagram with most of the important elements. As shown, it is important to state how many patients were analyzed for each outcome. In addition, the diagram shows whether or not the patients were analyzed on an “intent to treat” basis.

In this section, the statistical analysis is reported. These include the baseline demographics in order for the reader to determine how similar the groups were at the time of recruitment. For each primary and secondary outcome, there should be a summary of the results for each group (e.g. a mean or median) and an estimate of precision (a 95% confidence interval). The difference in means should be reported in the same way (mean difference and 95% confidence interval for the difference). This helps the clinician put the numbers into the perspective of a significant clinical difference. A p value reports the statistical significance. If there are multiple outcomes, the use of an adjustment should be reported. Finally, the incidence of adverse events is described in the results section, whether or not they were anticipated in the methods.

Discussion: Three main elements should be present in the discussion. There should be an interpretation of the results, taking into account the potential weaknesses in the study design and opportunities for bias. There can be some speculation about the generalization to the population in general. In particular, the authors might mention a group of patients that would not be expected to behave in a similar manner to the study population. Finally, the current study should be discussed in the context of the available evidence.
Proposed Bylaws Changes

Proposed bylaws changes to be voted on at the annual business meeting on, Thursday, April 27, 2006.

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<th>Addition for Disbursement Committee</th>
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<td>10.10.1: <strong>Disbursement Committee.</strong> Chair is appointed by the president with approval of the Board for a three year term. Other members are the Treasurer, Chair of the Education Committee, Chair of the Research Committee, and three (3) active members appointed by the president who have a history of significant service to the Society and are approved by the Board.</td>
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<td>10.10.2: <strong>Duties.</strong> To review research and education applications for funding and disburse monies to those projects with merit. The amount available for disbursement shall be determined by the Finance Committee and noted in the annual budget. This committee shall not exceed the budgeted amount without approval from 75% of the Board.</td>
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**References:**

CALL FOR NOMINATIONS

The following SOAP Director positions will be elected during the Business Meeting Thursday, April 27, 2006.

★Second Vice President ★Secretary

If you are interested in running for one of these positions or would like to nominate a candidate, please email soaphq@soap.org and we will provide more details.
Tocolytic Agents in the Management of Preterm Labor

Joanne C. Hudson, MD
Associate Professor, Director of Obstetric Anesthesia
Virginia Commonwealth University Health Systems
Richmond, VA

Preterm birth is birth before 37 weeks. Preterm delivery accounts for 12% deliveries, 60 to 80% infant deaths excluding congenital malformations and is associated with devastating morbidity and disability: respiratory distress syndrome (RDS), bronchopulmonary dysplasia, intraventricular hemorrhage (IVH), necrotizing enterocolitis (NEC), sepsis, cerebral palsy. Survival at 24 weeks is 50%, at 26 weeks 80%, about 34 weeks 99%. Neurological and sensorial deficits are especially high in newborns <31-32 weeks. Lecithin/sphingomyelin ratio at 31-32 weeks is 1.0., and at 35 weeks it is often >2.0 (minimal risk or RDS). Tocolysis is intended to inhibit labor, extend gestation and increase birth weight, improving infant morbidity and mortality. It can also be used when labor is initiated by a self limited etiology (cerclage, pyleonephritis or abdominal surgery). Diagnostic criteria are four uterine contractions in 20 minutes with cervical change 2 cm. or more. Contraindications include pneumoniae, severe preeclampsia/ eclampsia, maternal instability from hemorrhage or if delivery is imminent such as the presence of chorioamnionitis, severe preeclampsia/eclampsia, maternal infection, or if delivery is imminent such as the cervix > 4 cm. The fetus with intrauterine death, lethal anomaly, severe intrauterine growth restriction or a nonreassuring fetal assessment should be delivered. If preterm premature rupture of membranes occurs, tocolysis is not effective in delaying labor.

General treatment for preterm labor includes hydration, bed rest, and tocolytics. Neither bed rest nor hydration is effective. The mainstay of therapy is tocolytics. There are 5 classes of tocolytics (Table). Uterine muscle contraction is mediated through adenosine triphosphate (ATP) dependent binding process. Free intracellular calcium (Ca++) is required. Myosin light chain kinase (MLK) promotes myosin binding to actin. MLK is increased by calcium and inhibited by adenosine monophosphate (cAMP). Cyclic guanosine monophosphate (cGMP) reduces intracellular calcium. Oxytocin hydrolyzes membrane phospholipids to make arachidonic acid available for conversion by prostaglandin H 2 synthetase (cyclooxygenase) to PGF2α and PGE2, potent uterine constrictors. PGF2 alpha and oxytocin stimulate calcium release.

Placebo controlled studies suggest that beta-adrenergic receptor agonists (betas), prostaglandin inhibitors (PI) and atosiban are most effective short term. Betas, Magnesium sulfate (MgSO4), calcium channel blockers (CCB), PI and atosiban are all better than no treatment. There is no benefit in maintenance therapy. The greatest maternal harm is associated with betas > MgSO4 > PI. Calcium channel blockers and atosiban have the best maternal profile. Fetal/neonatal harms occur with PI > MgSO4 and Betas. Calcium channel blockers and atosiban have the best fetal profile.

Betamimetics are effective. Terbutaline is the most commonly used beta in the US. They delay delivery, may improve birth weight and reduce RDS. Betas have the greatest maternal side effects because of cross reactivity of B1 and B2 receptors. Most symptoms are mild. The tachycardia and stroke volume are a B1 effect, hypotension is a B2 effect. But metabolic problems as hyperglycemia, hypokalemia, lipolysis; and serious tachycardia, arrhythmias, angina, heart failure occur. Infection, inflammation or preeclampsia may predispose to pulmonary edema. Glucose, potassium, and intake and output must be monitored. Fetal tachycardia, hyperinsulinemia, hypoglycemia occur but acid base is usually normal. Tachyphylaxis from down regulation of B2 receptors requires increasing doses. Synergism with other beta agonists occurs. Use phenylephrine rather than ephedrine for hypotension. Tachycardia may be confused for hypovolemia and produce arrhythmias or angina.

Magnesium sulfate is safe but limited in effectiveness at 48 hours. Nonetheless, fewer maternal side effects make it the most popular agent in the US. Rapid infusion of MgSO4 can produce vasodilation with diaphoresis, flushing, and hypotension. Other effects include nausea (N), vomiting (V) headache (HA), visual disturbances, and palpitations. There have been cases of dyspnea, pulmonary edema, and chest pain. Maternal magnesium toxicity is related to serum concentration. Loss of reflexes occurs at 8-10 mEq/L, respiratory paralyzis at 10-15, and cardiac arrest at 20-25. Calcium gluconate (1 g IV) is the immediate antagonist. MgSO4 produces slow fetal heart rates and reduced variability. The newborn may have hypotonia, hyporeflexia, and respiratory depression. Rare deaths were due to excessive doses and prematurity. MgSO4 reduces general anesthesia requirements. Nondepolarizing muscle relaxants are a clinical problem only when large doses of MgSO4 are used.

Prostaglandin inhibitors (PI) are more effective than betas, MgSO4, and CCB with fewer maternal problems. They block cyclooxygenase (prostaglandin synthetase) and decrease the potent myometrial constrictors PGF2 alpha and PGE2. Gastrointestinal tract problems occur at lower rates than with betas, CCB, MgSO4. Reversible platelet dysfunction and bleeding are possible but epidurals are usually placed after failed tocolysis and not contraindicated. PIs are considered most harmful to the fetus because of the potential for constriction of the ductus arteriosus and production of oligohydramnios. Only 50% of the drug crosses the placenta, but the fetal liver is immature and the half life is 5 times greater than mother (4.5 hr vs 2 hr.). Constriction of ductus arteriosus occurs < 28 weeks and after 31 to 32 weeks gestation and if therapy exceeds 48 hours. Vascular constriction and subsequent increase in ADH results in reduced blood flow to the fetal kidney, brain, and mesentery. There may be a predisposition to necrotizing enterocolitis, small bowel perforation. Oligohydramnios can be seen within 24 hours but is readily reversed when drug is stopped. Indomethacin is effective in treatment of polyhydramnios. Use of indomethacin is confined to 28 to < 32 weeks. There is no placebo controlled study. Cochrane analysis finds numbers too small to recommend its use.

The calcium channel blocker (nifedipine) is very popular outside the US because it is low in cost, as effective as betas with a low incidence of mild cardiovascular effects. Suggestsions of reduction in neonatal outcomes of RDS, NEC, IVH, jaundice and maternal side effects is hopefully. As vasodialators, the side effects include flushing, headache, dizziness, nausea, reflex tachycardia, palpitations, but less than betas. Fetal acid-base is not disturbed. CCB may enhance the myocardial depressant effects of inhalation agents, local anesthetics and dantrolene. The combination of
MgSO₄ and CCB potentiates hypotension, left ventricle dysfunction and neuromuscular weakness. Respiratory depression is a risk.

Atosiban is a selective oxytocin – vasopressin receptor antagonist (not available in US). Atosiban is more effective than placebo, and possibly more effective than betas and CCB. But the Cochrane review concluded insufficient evidence of benefit over betas. Atosiban has the best maternal safety profile with no serious cardiovascular effects. But headache, vertigo, nausea and vomiting have been reported. Atosiban also has the best fetal profile after > 28 weeks, with no adverse fetal effects. Unfortunately, one trial suggested an increase in deaths at 12 months with more birth weights < 1500 grams, probably related to infection and extreme prematurity. The FDA did not approve because of concerns about effects on fetus < 28 weeks.

The nitric oxide donor, nitroglycerine (NTG), produces smooth muscle relaxation. While NTG did delay labor in some patients 24-48 hours, the evidence for effectiveness and fetal safety is insufficient to recommend routinely. Headaches are common and mild but the potential for hypotension exists. It is contraindicated in women with hypotension or preload–dependent cardiac lesions. There are little data on fetal effects.

### Agent Effectiveness

<table>
<thead>
<tr>
<th>Mechanism of Action</th>
<th>Fetal adverse effects</th>
<th>Maternal effects</th>
<th>Contraindication</th>
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<tbody>
<tr>
<td>Beta-adrenergic receptor agonists</td>
<td>tCAMP tMLK</td>
<td>↑FHR ↑insulin ↓glucose normal fetal acid-base</td>
<td>↑HR, palpitations ↑SV, ↓BP, tremors, dyspnea, angina pulmonary edema ↓K ↑glucose</td>
</tr>
<tr>
<td>Magnesium Sulfate</td>
<td>tCAMP tMLK</td>
<td>slows FHR ↓beat to beat variability</td>
<td>↑BP N/V/ HA, flushing, palpitations pulmonary edema, angina</td>
</tr>
<tr>
<td>Ca channel blockers Very effective</td>
<td>L type channel ↓Ca²⁺↑MLK</td>
<td>No fetal acid-base abnormal.</td>
<td>↑BP ↑HR, palpitations N/V HA, flushing</td>
</tr>
<tr>
<td>Prostaglandin inhibitors 28-31 wks.</td>
<td>↓PGF₂, ↓PGE₂</td>
<td>Constriction of PDA &gt; 32 wks. Oligohydramnios</td>
<td>GI problems</td>
</tr>
<tr>
<td>Oxytocin receptor blocker 28-34 wks.</td>
<td>tCAMP tMLK</td>
<td>&lt; 28 wks. Death, &lt;1500 grams</td>
<td>IV site only</td>
</tr>
<tr>
<td>Nitric Oxide Donor</td>
<td>tGMP, ↓Ca²⁺ tMLK</td>
<td>Insufficient data</td>
<td>↑BP, HA, ↑HR, palpitations N/V flushing</td>
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**ASA/SOAP Abstract Submission:**

The deadline to submit your abstracts for the ASA and SOAP Jointly Sponsored ASA 2006 Abstract Session is **April 1, 2006**.

Additional information available at: [http://www.call4abstracts.com/asa/](http://www.call4abstracts.com/asa/)
SOAP 2006 Abstracts
Gertie Marx Symposium
Thursday, April 27, 8:00-9:30 Am
SOAP A1-A6

SOAP A1
Sterile Technique Practices (STP) for Obstetrical Neuraxial Analgesia and Anesthesia (ONAAA) – Year 2005 Survey

SOAP A2
Ethnicity and the Distance to the Epidural Space in Parturients

SOAP A3
Peripheral Venous Pressure as a Hemodynamic Variable in Pregnant Patients Undergoing Spinal Anesthesia

SOAP A4
Comparison of Loss of Resistance Technique with Air Versus Saline to Identify Epidural Space for Combined Spinal Epidural Labor Analgesia

SOAP A5
Prophylactic Granisetron does not Prevent Nausea and Vomiting During Elective Cesarean Section Under Spinal Anesthesia

SOAP A6
Effects of Crystallloid and Colloid Preloads on Coagulation Assessed by Thromboelastography in Parturients Prior to Elective Cesarean Section

Oral Presentation #1
Thursday, April 27, 10:15-11:30 AM
SOAP A7-A11

SOAP A7
Lumbar Dural Sac Width Determined by Ultrasound does not Correlate with Sensory Levels of Spinal Anesthesia for Elective Cesarean Section

SOAP A8
A Randomized Controlled Trial of the Impact of Combined Spinal-Epidural Analgesia on the Success of External Cephalic Version for Breech Presentation

SOAP A9
Maternal Heart Rate Variability Before and After Combined Spinal-Epidural Labor Analgesia

SOAP A10
Maternal Body Temperature Changes With Intermittent Versus Continuous Labor Epidural Analgesia

SOAP A11
Simulation in Labor and Delivery: Full Team, in Situ Drills in a Large HMO

Zuspan Award Symposium
Thursday, April 27, 2:30-3:30 PM
SOAP A12-A15

SOAP A12
A Womb with a View: Anesthetic, Obstetric, and Neonatal Care Issues for In-Utero Fetal Surgery

SOAP A13
Patient-Controlled Analgesia with Background Remifentanil Infusion for Labor Pain

SOAP A14
Does Eating in Labor Influence Obstetric Outcome: A Randomized Controlled Trial in 2400 Primiparous Women?

SOAP A15
Explicit Communication In An Obstetrical Emergency

Oral Presentation #2
Friday, April 28, 8:00-9:00 AM
SOAP A16-A19

SOAP A16
Comparison Of Contractions: IUP vs. EHG

SOAP A17
CSF Concentration does not Predict Onset or Duration of Spinal Fentanyl for Labor Analgesia

SOAP A18
Combined Spinal-Epidural Versus Epidural Analgesia in Multiparous Women

SOAP A19

Best Paper Presentations
Saturday, April 29, 1:00-2:30 PM
SOAP A20-A25

SOAP A20
Maternal Pneumoperitoneum with Carbon Dioxide does not Depress Near-Term Fetal Sheep Cerebral Oxygenation

SOAP A21
3 Holes are not Better than 1: A Randomized, Prospective Comparison of 2 Wire-Reinforced Epidural Catheters for Labor Analgesia

SOAP A22
Neuropathic Injury to the Levator Ani Occurs in 1 in 4 Primiparous Women

SOAP A23
Tocolytic Desensitization: Plasmalemmal Sodium Calcium Exchanger (NCX) Activity and Function in Myometrial Cytosolic Free Calcium Concentration ([Ca2+]c) Oscillations and Relaxation

SOAP A24
MRI Following Neuraxial Analgesia. Can a Radiologist Determine what is Pathologic?

SOAP A25
Thromboembolism Risk Assessment: Guidelines Alone will not Change Practice!

Poster Review #1
Friday, April 28, 10:30-11:30 AM
SOAP A26-A54

SOAP A26
Flow Dynamics of Multi-Port Epidural Catheters

SOAP A27
Chronobiology of Spinal Bupivacaine During Initial Phase of Labor

SOAP A28
Influence of Chronopharmacology on Duration of Intrathecal Fentanyl Labor Analgesia

SOAP A29
A Comparison of Combined Spinal-Epidural-PCA Analgesia with Continuous Epidural-PCA Analgesia Alone for Labor Pain

SOAP A30
The Use of Intrathecal Catheter After Accidental Dural Puncture

SOAP A31
Women with Induced Labor do not Receive Benefit from Delaying Labor Epidural Analgesia

SOAP A32
The Influence of Severe Preeclampsia on Maternal Cerebral Circulation Haemodynamics

SOAP A33
Epidural Neostigmine-Bupivacaine for The Treatment of Labor Pain

SOAP A34
Development of an Assessment Tool for Evaluating Performance During General Anesthesia for Cesarean Section Utilizing a Human Patient Simulator

Continued on page 10
SOAP A35  
Descriptors and Management of Patients Requiring Immediate Post-Partum Blood Transfusion: A Chart Review

SOAP A36  
Assessment of Coagulation in Preeclamptic Women with Thrombocytopenia

SOAP A37  
Evaluation of Labor Pain Using Hand Manometry

SOAP A38  
Anesthesia for Cesarean Delivery: A Survey of What Women will Tolerate

SOAP A39  
Three Techniques for the Prophylaxis of Post-Dural Puncture Headache Following Unintentional Dural Puncture in Parturients: A Preliminary Report

SOAP A40  
Incidence of Accidental Dural Puncture “Wet Tap” in Parturients with Disposable vs. Reusable Epidural Kits Among Anesthesia Residents in Training

SOAP A41  
The Benefits Of Intraoperative Small-Dose Ketamine On Postoperative Pain After Cesarean Section

SOAP A42  
Who Refuses Epidural Analgesia for Labor And Why? – A Survey of Two Populations

SOAP A43  
Incidence of Postdural Puncture Headaches Following Labor Epidural Placement Comparing Loss of Resistance to Air Versus Saline in an Academic Institution

SOAP A44  
The Transverse Approach of Lumbar Spine Ultrasound Provides Reliable Landmarks for Labor Epidurals

SOAP A45  
Prevalence of Neonatal Hypoglycemia in Gestational Diabetic Women: Glyburide Versus Diet-Controlled Diabetes Mellitus

SOAP A46  
The Effects of Adding Fentanyl and Epinephrine on the Minimum Local Analgesic Concentration of Bupivacaine for Labor Analgesia

SOAP A47  
The Association Between Breakthrough Pain and Request to Discontinue Second Stage Labor Epidural Analgesia and the Risk of Forceps Delivery

SOAP A48  
Evaluation of a High-Risk Obstetric Anesthetic Clinic Based in a Large Tertiary Obstetric Referral Center

SOAP A49  
Evaluation of Kybele Program for Croatia

SOAP A50  
The New Labor Pain Scale (LPS): Description & Properties

SOAP A51  
A Double-Blinded, Randomized, Placebo-Controlled Trial of Calcium Chloride for the Augmentation of Uterine Tone Following Cesarean Delivery

SOAP A52  
Minimum Local Anesthetic Dose (MLAD) of Intrathecal Levobupivacaine in Caesarean Section and the Effect of Intrathecal Sufentanil

SOAP A53  
Fentanyl and Sufentanil as Adjuncts for Patient Controlled Epidural Analgesia in Labor: An Equivalence Study

SOAP A54  
Use of 360 Degree Evaluation Tool for Assessment of the ACGME General Competencies During an Obstetric Anesthesia Rotation

SOAP A55  
Oxytocin Requirements at Cesarean Section: An Opinion-Based Survey of Obstetricians

SOAP A56  
Comparison of Ropivacaine, Bupivacaine, and Levobupivacaine Infusions for Labor Analgesia

SOAP A57  
Peripheral Venous Cannulation in Parturients Using Ultrasound Guidance

SOAP A58  
The Effect of Formal Patient Education on Patient-Controlled Epidural Analgesia During Labor

SOAP A59  
What is the Best Skin Preparation Solution for Labor Epidural Analgesia? A Randomized Prospective Trial Comparing Chloraprep™, Duraprep™, and Chlorhexidine 0.5% in 70% Alcohol

SOAP A60  
Maternal Serum Interleukin-6 Changes with Continuous Versus Intermittent Labor Epidural Analgesia

SOAP A61  
Scrubs or Dress-Up in the Preoperative Clinic: Does it Matter?

SOAP A62  
Minimum Local Analgesic Dose (MLAD) of 5ml of Intrathecal Levobupivacaine and Ropivacaine, in Spontaneous Labouring Women

SOAP A63  
Epidural Analgesia and the Incidence of Episiotomy

SOAP A64  
Fetal pH After Phenylephrine or Ephedrine Infusion Titrated to Maintain Systolic Blood Pressure at Cesarean Section Under Spinal Anesthesia

SOAP A65  
Peripartum Anesthetic Management of Patients With Aortic Stenosis

SOAP A66  
Safe Regional Anesthesia in ITP in Pregnancy – A Retrospective Study

SOAP A67  
A Combination of Phenylephrine and Ephedrine Infusion Maintains Systemic Vascular Resistance and Prevents Post-Spinal Hypotension in Cesarean Delivery

SOAP A68  
Epidural Catheter Insertion Depth and Labor Analgesia: A Retrospective Analysis

SOAP A69  
A Randomized Double-Blind Comparison of a 5 Unit Intravenous Oxytocin Bolus Versus Placebo as a Strategy to Prevent Uterine Atony at Cesarean Section in Women Who are at Increased Risk of Post-Partum Hemorrhage

SOAP A70  
Immediate Postoperative Complications: Elective Versus Non-Elective C-Section

Poster Review #2 Saturday, April 29, 9:45-10:45 AM A55-A88

SOAP A55  
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SOAP A70  
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SOAP A71
Twenty Four-Hour Labor Epidural Analgesia Service does not Significantly Increase Workload at Midnight

SOAP A72
Ventilatory Support of Pregnant Patients with Respiratory Distress Syndrome

SOAP A73
Revisiting Epidural Demerol for Labor Analgesia

SOAP A74
Anesthetic Interventions During Vaginal Twin Deliveries

SOAP A75
More than Dural Puncture? An Analysis of Cranial Subdural Hematomas in Obstetrical Patients After Epidural Placement

SOAP A76
Caffeine Significantly Decreases the Need for Epidural Blood Patch After Accidental Dural Puncture

SOAP A77
Management of a Pregnant Patient with Status Asthmaticus and Herion Abuse

SOAP A78
Two Cases of Intracranial Venous Thrombosis Detected After Post-Partum Epidural Blood Patch

SOAP A79
Atypical Presentation of an Epidural Abscess in a Parturient

SOAP A80
Epidural Labor Analgesia in a Patient with Unclassified Von Willebrand’s Disease

SOAP A81
Where’s the Catheter? Epidural Labor Analgesia in a Chronic Pain Patient with a Pump Implanted for Intrathecal Hydromorphone Therapy

SOAP A82
Life-Threatening Acute Peripartum Aortic Dissection in a Patient With Marfan Syndrome

SOAP A83
Case Report: Cesarean Section in a Patient with Beckwith Wiedemann Syndrome

SOAP A84
Use of Norepinephrine in Pregnancy After Cardiopulmonary Bypass

SOAP A85
Anesthetic Management of a Parturient with Neurofibromatosis Type I vs. Type II

SOAP A86
Evaluation of Labor Epidural Information on the Internet

SOAP A87
Evaluation of Hand Hygiene Compliance Among Anesthesiology Residents on Labor and Delivery – Can Old Habits Be Changed?

SOAP A88
Anesthesia for Cesarean Section in a Patient With Holt-Oram Syndrome

Poster Case Reports
Sunday, April 30, 9:30-10:30 AM

SOAP A89
Subarachnoid Hemorrhage in a Previously Healthy Pre-Term Parturient

SOAP A90
Thoracolumbar Epidural Abscess After Combined Spinal-Epidural for Labor and Tubal Ligation

SOAP A91
Anesthesia Management of a Parturient with Arrhythmogenic Right Ventricular Dysplasia and an Implantable Cardiac Defibrillator Undergoing Cesarean Delivery

SOAP A92
Excision of a Large Pheochromocytoma With Fetal Preservation in a Parturient

SOAP A93
Can Puppp Increase The Risk Of An Epidural Abscess?

SOAP A94
Epidural Labor Analgesia in a Patient with Pemphigoid Gestationis

SOAP A95
Successful Vaginal Delivery Following Total Spinal Anesthesia During Labor

SOAP A96
When Transfusion Leads To Life-Threatening Anemia: Hyperhemolysis in a Parturient with Sickle Cell Disease

SOAP A97
Ex Utero Intrapartum Treatment Procedure in a Patient with Arthrogryposis Multiplex Congenita Via by Continuous Spinal Anesthetic and Intravenous Nitroglycerine for Uterine Relaxation

SOAP A98
Posterior Reversible Encephalopathy Syndrome (PRES): A Complicated Case of Post-Partum Headache

SOAP A99
Transient Paraplegia After Neuraxial Labor Analgesia: A Case Report

SOAP A100
Uterine Inversion and Postpartum Hemorrhage Treated with Recombinant Factor VIIa

SOAP A101
Anaesthesia for Cesarean Section in a Case of Spina Bifida and Pierre-Robin Sequence

SOAP A102
Right Ventricular Thrombus in a Patient with Sever Pre-Eclampsia

SOAP A103
Pulmonary Artery Hypertension During Pregnancy

SOAP A104
Nitrous Oxide as a Cause of Internal Iliac Artery Occlusion Balloon Rupture

SOAP A105
Modified Rapid Desensitization in Obstetric Patient with Needle Phobia

SOAP A106
Anesthetic Management of Labor and Delivery in Congenitally Corrected Transposition of the Great Arteries

What’s happening on the SOAP website?

SOAP is conducting a member survey.
Please go to http://www.soap.org/membersurvey.htm for details. Your opinion counts!

The new “Ask SOAP a Question” form is receiving daily requests. Learn more by going to http://www.soap.org/askSOAPaQuestion.htm

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