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The ballroom at the Manchester Grand Hyatt in San Diego was full at a session during the joint SPA/SPANZA Annual Meeting on October 15. Please see a summary of the meeting on page 8.

## Anesthesia and Vaccinations

By Rita Agarwal MD, FAAP

University of Colorado  
The Children's Hospital, Denver

There are several questions that the anesthesia provider may have with regard to delivering an anesthetic in a child who will be receiving a routine vaccination and they include the following:

Do childhood vaccines prior to or immediately after anesthesia render them less effective?

Do childhood vaccines prior to or immediately after anesthesia increase the child's risk of an adverse reaction?

Would complications of vaccinations confuse post-operative assessment?



Dr. Agarwal

Should we postpone elective anesthesia or surgery in a child who has been recently vaccinated?

There are no good answers to these questions; however two recent reviews, an editorial and several excellent letters to the editor try and bring some science and rationale to the issue.

- Anesthesia and surgery have been shown in-vitro to cause immuno-modulation in adults, and possibly children.
- Anesthesia and surgery may lead to impaired immune responses in-vivo in children and adults, however these findings are less clear and their significance are not known. Most anesthesia related immune-suppression is short-lived (hours to a couple of days), while immune responses to vaccines may take days to months to fully develop.
- There is a theoretical risk that anesthesia may render vaccines less effective or increase the

*Continued on page 4*

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### Society for Pediatric Anesthesia



## FROM THE EDITOR

# You're holding the last printed edition of SPA News

It was inevitable, but this is the last written copy of the SPA Newsletter to be delivered to your address.

Particularly since our last Newsletter focused on "Going Green in the OR," it made sense to carry this message to all aspects of our practices and provide the readers with the same Newsletter content, but in electronic form rather than glossy mailings. The Board of Directors of the SPA had discussed this possibility for the past few sessions, and this time it was met with enthusiasm and a unanimous vote to go electronic for environmental and financial reasons.

There is actually no argument against this decision. Many of you, myself included, prefer your reading material in hand, on paper, and with pages that turn. Those days are limited and the next generation will benefit. To show your support, join me in accepting this new era with grace.

The next editions of the SPA Newsletter will be sent to you via e-mail as an attachment or link. You may then choose whether to view this on line or to print yourself a copy if you feel the need to do so. There will be upcoming blurbs on some of the founding fathers of the SPA, so if anyone has any interesting tales, please share them with the other readers. From what I can tell, the early group was full of strong personalities, so the stories should flow freely.

Our next edition will include the reviews of the October SPA/ASA and an update on the new PALS recommendations among other contributions. In addition, it is time for another Pro/Con, so if there is a controversial issue in your practice, let me know and we'll find experts to debate it.

So, sit back in your recliner with this current edition and a beverage of your choice, turn the pages, then feel free to use it as a coaster for your beverage before it is ultimately tossed into the trash bin. As I said previously, it was inevitable.



**Allison Kinder Ross, MD**  
Duke University  
Medical Center,  
Durham, NC

## Pediatric Anesthesia Certification Update

**By Frank McGowan**

*Medical University of South Carolina*

The application made by the SPA to the American Board of Anesthesiology (ABA) to obtain subspecialty certification status for pediatric anesthesiology was approved unanimously by the ABA Board of Directors earlier this year.

As the next step in this process, the ABA submitted a formal application to the American Board of Medical Subspecialties (ABMS). A subcommittee of the ABMS is currently reviewing this application; a decision by the full ABMS membership is not expected before late Spring or Summer, 2011, at the earliest.

Anesthesiology subspecialties currently recognized by the ABA and ABMS are Critical Care Medicine, Pain Medicine, and Hospice and Palliative Medicine. The SPA Board continues to actively monitor and support this process."

*From the Immediate Past President*

### Thank you for the privilege of serving

It has been my honor and a privilege to have functioned as the SPA President these past two years. This has been an exciting time in our history and I look forward to many accomplishments yet to come under our new leadership.

During the past two years we have improved our financial position and encouraged the growth of the patient education/research and safety fund. We continue to promote the approval process for subspecialty certification in pediatric anesthesiology by the American Board of Medical Specialties. Frank McGowan and I were present during the first public hearing of the Board on the application proposed by the ABA. The growth of the Congenital Cardiac Anesthesia Society has been beyond expectations as supported by SPA. We continue to offer support to the Foundation for Anesthesia Education and Research grants and the Wake Up Safe patient safety initiative.

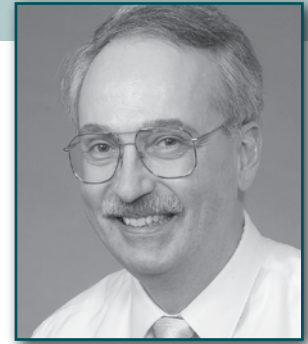
Our membership has grown slightly over the past few years and we continue to be approached by individuals and organizations as a society recognized with the interests of children first. These individuals and groups include anesthesiologists, anesthesia groups, state and federal agencies and other nonprofit organizations. Our collective experience and reasoning are being recognized as a voice for the interests of children and their families in the perioperative period.

Pediatric anesthesia as a specialty continues to mature, and we should collectively continue to move forward with our efforts at

promoting research, education and safety. We have been given a tremendous privilege of caring for children when they are vulnerable, and in sharing our expertise with colleagues to continue to advance their skill and experience.

Dr. Lynn Martin will continue to move us forward with further international outreach and collaboration and we have elected future leaders in our officers and Board of Directors to keep the society strong. Please continue to support SPA efforts with your participation, whether by volunteerism, scholarly contribution and/or financial support. The future holds many new promises for us to continue to improve the lives and safety of children who need our professional services.

Thank you for the privilege to have served on the Board and in office for the past many years. I look forward to contributing to a great society and our members for years to come. Remember, it is our society, so your voice and efforts make a difference. Please share your talents with us.



**Joseph R. Tobin, MD, FAAP,  
FCCM**

Wake Forest University  
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Winston-Salem, NC

*From SPA's 2010-2012 President*

### Blessed - not jinxed - to be SPA's 13th president

It is my distinct honor and pleasure to address you as your newly elected 13th President of the Society for Pediatric Anesthesia. Superstitious individuals would state that my tenure as president is likely to be jinxed by the infamous number 13. Fortunately, I am not superstitious, and actually feel blessed to be the 13th president. You see that I am the one that has been given the opportunity to lead the society during our 25th anniversary celebration. It will be my job to briefly reflect back on the large number of accomplishments achieved by SPA in our first quarter century of existence and help prepare us for the next 25 years of growth as the specialty of anesthesiology and medicine.

I have had the good fortune of being an active member of this society since its inception and the privilege of serving as Program Chair for two annual meetings, at-large member on the Board of Directors and most recently as an elected officer of the Board. Through these activities, I have been given the chance to grow professionally and make many new friendships. I have been given the opportunity to learn from some of the best leaders in our field (Mark Rockoff, Steve Hall, Peter Davis, and Jay Deshpande).

Perhaps most rewarding has been my chance to watch my friend and colleague Joe Tobin lead our society during very challenging

political and fiscal times. The SPA members owe a tremendous debt of gratitude to Joe for his unwavering commitment to the enhancement of perioperative care for children. He has served as a true north star for our specialty, quietly but consistently, pointing us to the high road during the rough weather we have endured.

I have the good fortune of building on the foundation set by many giants in our field that have preceded me in this office. While I could and perhaps should devote this entire column to these accomplishments, time and space constraints will allow me to only focus on a few (for now!).

Dr. Myron Yaster, the founder and first SPA president, has served as a personal mentor to me throughout my professional career, up



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*Continued on page 8*



# Anesthesia and Vaccinations, from page 1

risk of complications. There are a few case reports (primarily from the veterinary literature, but an occasional human case) that have shown decreased antibody titers in animals after immunization and surgery than would occur after immunization alone.

- Vaccination reactions are not infrequent, usually mild, occur within 2-21 days, are self-limited, but may mimic commonly seen post-operative complications or side effects. There is no evidence that these reactions could delay diagnosis or treatment of a post-operative problem, or exacerbate post-operative complications.
- The CDC has no policy regarding the timing of vaccinations and surgery.
- There are recommendations from other countries' national agencies to delay elective surgery for two days (inactivated vaccines) to three weeks (live attenuated species) if possible, and to delay vaccination until between several days to several weeks after surgery.<sup>7</sup>
- Short et al conducted an international survey of members of the Association of Paediatric Anaesthetists of Great Britain and Ireland (APAGBI) and the Society for Paediatric Anaesthesia of New Zealand and Australia (SPANZA).<sup>2</sup> Sixty percent of respondents would anesthetize a patient within seven days of having received a live vaccine. Of the 40% who would not, the time they recommended for delaying surgery ranged from seven days to six weeks. Many practitioners evaluated the patient's physical status before deciding. If the patient had a low grade fever or other signs of distress they would postpone surgery, but would proceed if the child seemed healthy.
- All of the recent articles do recommend postponing elective anesthesia and surgery for two days after inactivated vaccines and one to three weeks after attenuated live vaccines, despite the lack of evidence.<sup>1-4</sup>
- Crowcraft and Elliman, in an impassioned and compelling letter felt that the risk of adding barriers to appropriate immunization far outweighed the risk of anesthesia and surgery in the recently immunized child.<sup>6</sup> They argued vehemently that avoiding or postponing anesthesia in a recently immunized child was unnecessary, given the scant evidence on the subject. They also felt that recent anesthesia or surgery should not be cause for delaying scheduled immunizations. If sufficient doubt exists regarding the efficacy of the immunization response, they argue that the vaccine should be repeated.

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**Table 1: Comparisons of side effects or complications of immunization and surgery**

Immunization	Surgery
Inflammation	Inflammation
Pain	Pain
Fever	Fever
Irritability	Irritability
Rash	Rash
Prolonged Crying	Crying
Neurodeficiency	Agitation and Excitement
Thrombocytopenic purpura	Septic petechiae
Anaphylaxis, Shock	Sepsis, Shock

Modified from SIEBERT, J.N., POSFAY-BARBE, K.M., HABRE, W. & SIEGRIST, C. A. Influence of anesthesia on immune responses and its effect on vaccination in children: review of evidence. *Pediatric Anesthesia* 17 (5), 410-420, 2007

**Table 2: In vitro effects of general anesthesia on adult immunity**

Anesthetic Agent	Immune Dysfunction
Thiopental	Impaired lymphocyte's proliferation, Impaired TH1-cytokines production
Propofol	Impaired PMNs and monocytes function, Reduced LPS-recognition molecule CD14 on monocytes surface
Sufentanil/alfentanil	Reduced leukocyte endothelial transmigration; decreased NKCC Reduced IL-6 response Impaired lymphocyte's proliferation
Fentanyl	Increased number of NK cells and NKCC Increased number of CD8 T-cells
Volatile anesthetics	Inhibitory effects on PMN functions; Increase pro-inflammatory cytokines TNF- $\alpha$ , IL1- $\beta$ and IFN $\gamma$ <sup>b</sup> Impaired lymphocyte's proliferation

NK, Natural Killer cells; NKCC, NK cytotoxicity; IL, interleukin.

<sup>a</sup>Impaired in surgical intensive care patients in response to pokeweed mitogen (5). Adapted from Hunter (7) and Schneemilch (6).

<sup>b</sup>Mechanical ventilation within 2 h of exposure.

Modified from: SIEBERT, J.N., POSFAY-BARBE, K.M., HABRE, W. & SIEGRIST, C.-A. Influence of anesthesia on immune responses and its effect on vaccination in children: review of evidence.

*Pediatric Anesthesia* 17 (5), 410-420, 2007.

# An update on studies of anesthetic neurotoxicity

By Caleb Ing, MD; Radhika Dinavahi, MD; and Lena S. Sun, MD  
Division of Pediatric Anesthesiology of Columbia University and  
Morgan Stanley Children's Hospital of New York

We would like to report an update on some of the research activities related to clinical studies of anesthetic neurotoxicity.

There have been two major symposia specifically focused on anesthetic neurotoxicity. In March 2010, under the auspices of the SAFEKIDS initiative, the IARS and FDA co-sponsored a joint one-day symposium during the annual IARS meeting in Honolulu, HI. SAFEKIDS is a Public-Private Partnership that is being jointly developed by the IARS and the FDA to provide the overarching infrastructure to implement and sustain pre-clinical and clinical research in anesthetic neurotoxicity. The SAFEKIDS symposium was well attended and the participants were all anesthesiology leaders or investigators with a research interest in anesthetic neurotoxicity.

A scientific symposium with more diverse representation from other disciplines (including child development, neuro-imaging, epidemiology, outcomes research, comparativeness effectiveness research) was held in New York on May 8, 2010. This symposium, entitled: "Anesthesia and Neurodevelopment in Children" was the second such symposium co-sponsored by Columbia University and Morgan Stanley Children's Hospital of New York (the first symposium of the same name was held on May 2008 and it was also reported in the SPA Newsletter).

There were three main sessions: (1) update, (2) epidemiology, and (3) neurodevelopment. During the update session, Dr. Loeplke and Dr. Davis provided an update of the pre-clinical and clinical studies in anesthetic neurotoxicity, respectively.

Dr. Lisa Wise-Faberowski reported her recent research in the laboratory, and Dr. Charles DiMaggio presented his latest findings from analysis of a birth cohort of twins using the NYS Medicaid dataset. His cohort consisted of 5824 twin pairs, 303 of whom had been exposed to anesthesia before the age of three years. He found that anesthesia exposure increases the likelihood of having a subsequent diagnosis of developmental disorders, and the risk increases with increasing number of exposures.

However, specific analysis of risk in twin pairs discordant for anesthesia exposure did not reveal any increased risk for subsequent diagnosis of developmental disorder. These findings were similar to Bartel's 2009 study looking at 1143 monozygotic twin pairs that also found no difference in performance in parental assessment and school surveys in twin pairs discordant for anesthesia exposure. DiMaggio's study underscores the importance of confounding influences that could affect the finding of any association of anesthesia exposure and subsequent developmental problems.

The epidemiology session included a presentation from Dr. Ezra Susser on the latent health effects of early childhood exposure, presentations on comparative effectiveness research (Jean Slutsky), administrative databases for health outcome research

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## Lockhart, Charlie Lockhart: James Bond 007

*From the Editor: This is a brief account regarding one of the early leaders in the Society, the first in a series of short stories to be presented on the history of the SPA for the readers of our Newsletter. Any contributions of your own personal accounts or interesting stories with regard to SPA history will be appreciated.*

By **Zulfiqar Ahmed, MD**  
Children's Hospital of Michigan  
Wayne State University

The Society for Pediatric Anesthesia (SPA) was formed with the notion that a society was needed for anesthesiologists who are interested in pediatric anesthesia.

At that time, the American Academy of Pediatrics (AAP), Section on Pediatric Anesthesia had a membership clause that only anesthesiologists with 90% or more of pediatric surgical caseload were eligible for membership for that section. At the time when efforts were underway to organize SPA, Charlie Lockhart was the President of the AAP Section on Pediatric Anesthesia.



Dr. Lockhart

As a number of anesthesiologists were forming the Society for Pediatric Anesthesia, it was considered especially important to maintain collegial relationships with the AAP. The purposes of these two societies were similar, but there were also some significant differences.

AAP's membership was primarily limited to anesthesiologists with predominantly pediatric anesthesia practices. AAP was mainly involved in political advocacy and pediatric issues. SPA was formed with a focus on a wider audience of anesthesiologists with an interest in pediatric practice, but included those who may be doing fewer pediatric cases in their practice. These SPA members were interested in enhancing their knowledge and skills in this newly formed specialty.

Most of the knowledge and techniques were self-taught and extrapolated from adult anesthesia knowledge. As a result, there evolved a great need to develop educational opportunities to collaborate and learn from each other's experiences and to advance the knowledge of the science and art of pediatric anesthesia.

Charlie Lockhart, in his capacity as the President of AAP section on Pediatric Anesthesia, did his part to facilitate the formation of the pediatric anesthesia society. Charlie put his support behind the efforts of Myron Yaster, Milt Aper, Jack Downs, Mark Rogers, Al Hackel, and Aubrey Maze, among others.

When the society was formed, Charlie's membership number was #7. Hence he was nicknamed 007 for the Society for Pediatric Anesthesia.

# The transversus abdominis plane block in review: Can it replace an epidural?

By Chris Glover, MD

Texas Children's Hospital

Although epidurals remain the gold standard for providing postoperative pain relief in open surgeries covering the thorax and abdomen, their placement may sometimes be contraindicated or not warranted based on patient pathology or postoperative disposition. One alternative to epidural placement is the transversus abdominis plane (TAP) block. First described by Rafi in 2001 as a landmark technique to block the anterior abdominal wall, this block's popularity continues to increase with ultrasound's integration into regional anesthesia<sup>1</sup>. Placement via ultrasound guidance in pediatric patients was subsequently reported in 2008<sup>2</sup>. This brief synopsis covers anatomy, block performance, and limitations associated with its placement.



Dr. Glover

The technique initially described by Rafi for abdominal field block uses the Triangle of Petit as the anatomic landmark. The borders of this triangle are the external oblique, the latissimus dorsi, and the iliac crest. A blunt needle would be used to walk off the iliac crest until a fascial "pop" was felt and a local anesthetic was then deposited<sup>1</sup>. This lumbar triangle is of particular importance, as multiple nerves (the intercostals T7-T12, the ilioinguinal nerve, and iliohypogastric nerve) traverse in the plane between the internal oblique and transversus abdominis. This technique has subsequently given way to ultrasound placement with identification of the abdominal musculature (external oblique, internal oblique, and transversus abdominis) and deposition of a local anesthetic (0.2 ml/kg to a max of 20cc) in the plane between the internal oblique and the transversus abdominis<sup>3</sup>. Positioning of the probe can vary based on the age of the child and the level of blockade needed with placement along the midaxillary line<sup>2</sup>, subcostal area<sup>4</sup>, or just lateral to the umbilicus<sup>5</sup>. The midaxillary approach seems to be the most common approach with in-plane needle insertion along the anterior axillary line (see figures 1&2).

There is scarce data covering use of TAP block in children, but a recent randomized trial showing promise in analgesic efficacy for appendectomies was published in 2010<sup>6</sup>. Multiple studies have shown promise with efficacy over a multitude of procedures but limitations with this block exists<sup>7,8</sup>. Controversy exists over the level of blockade that can be attained. McDonnell et al found in a study using cadavers and volunteers that local anesthetic injected in volunteers resulted in dermatomal blockade from T7 to L1<sup>9</sup>. This has not been reproduced to date with multiple subsequent studies having found sensory blockade confined along the T10-L1 dermatomes<sup>10,11</sup>. We have found similar levels of sensory blockade at our institution and the use of TAP blocks is confined primarily to surgeries of the lower abdomen (colostomy closures, hernias, open appendectomies). There has been some promise with the subcostal approach to obtain a higher level of sensory blockade (up to T7), but a randomized control trial has not been performed

as of yet<sup>12</sup>.

While rare, complications can occur with any block. The available data suggests that TAP blocks are relatively safe. Bowel perforation, given its anatomic proximity, has yet to be reported in the literature. There has been one case report of a liver hematoma that occurred after TAP block while another case report revealed a catheter tip in the abdomen with intraperitoneal injection of local anesthesia<sup>13,14</sup>. In closing, the TAP block is yet another useful adjunct in providing postoperative analgesia in our patient population. The anatomy is easily identifiable and reproducible across a spectrum of patient sizes and the reported side effect profile is minimal. While there remains some skepticism on its potential to

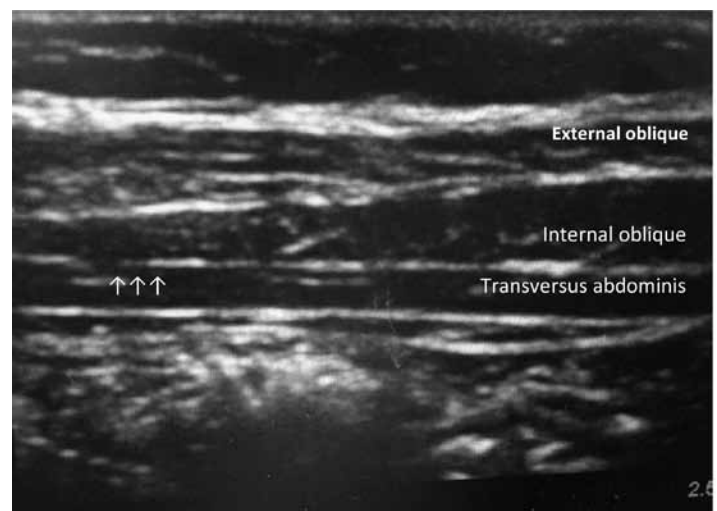


FIGURE 1: Transverse view of the abdominal wall musculature.



FIGURE 2: Probe placement and needle insertion along midaxilla.



replace epidurals, the TAP block continues to play an important role as an alternative to epidural placement.

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## Neurotoxicity, from page 5

(Dr. Sigal Kaplan) and an overview of the HCUP databases (Dr. Claudia Steiner). The neurodevelopment session included presentations by Dr. Elizabeth Sowell (“Imaging the Developing Human Brain and the Impact of Exposure to Drugs of Abuse”), Dr. Kimberly Noble (“The Developing Human Brain: Cognition and Experience”), and Dr. Barbara Clancy (“Translating Neurodevelopment Timing From Experimental Species to Humans”).

With respect to clinical studies on anesthetic neurotoxicity, we know of several groups that are performing analyses of existing datasets, and two ongoing large-scale studies that are collecting data through prospective and direct assessment of neuropsychological function.

Dr. Tom Hansen’s group from the Netherlands is using a Danish birth cohort to study academic performance in adolescent patients who received general anesthesia during infancy for inguinal hernia repair. Their study uses a random population sample as the comparison group. The complete analysis of their results is pending.

A collaborative effort is under way between the Columbia University investigators and investigators in Australia (Dr. Andrew Davidson’s group in Melbourne, Dr. Von Ungern-Sternberg’s and Dr. Whitehouse’s in Perth) to use the RAINE study cohort to perform detailed analysis of the effects of anesthesia exposure and a variety of directly assessed neurodevelopmental outcome measures. The RAINE cohort is a made up of children in Western Australia who have been followed up for almost 20 years with extensive neuropsychiatric testing for the purpose of understanding child and adolescent health and development.

The two large-scale studies proposing to perform prospective data collection on neuropsychological function are the GAS study and the PANDA (Pediatric Anesthesia and NeuroDevelopment Assessment) study. The GAS study is an international study with 26 participating institutions whose PI is Andrew Davidson in Australia, Neil Morton in the UK, and Mary Ellen McCann in the US.

The GAS study is a randomized trial that compares general sevoflurane anesthesia with regional anesthesia for infants undergoing inguinal hernia repair. The follow-up period will be for five years, with evaluation performed at age 2 years and 5 years. A total of 600 children will be enrolled for the study. The evaluation at age two years will be performed using the Bayley Scales for Infant Development-III, and the evaluation at age 5 years will include the Wechsler Preschool and Primary Scale of Intelligence-III and additional neuropsychological test within NEPSY II. The GAS study in the US has been supported by the SAFEKIDS initiative. Congratulations to the US investigators of the GAS study in receiving NIH funding for the study.

The PANDA study is a multi-site study that will involve eight US study sites (Boston Children’s, Children’s of Philadelphia, Chicago Children’s Memorial, Cincinnati Children’s, Pittsburgh Children’s, University of Michigan Children’s, Vanderbilt Children’s and Columbia University – Children’s of New York). It is an ambi-directional, sibling-matched cohort study that will enroll a total of 1,000 children or 500 sibling pairs. The period of anesthesia exposure will be before 36 months of age, and the exposure is limited to a single episode of general anesthesia for inguinal hernia repair in ASA I and ASA II patients. The study will perform an extensive neuropsychological battery in children between age 8 and 15 years. The planning of the PANDA study is currently funded by the NIH. In addition, the PANDA study has also received funding support from the SAFEKIDS initiative for pilot feasibility studies.

In summary, since the initial FDA Advisory Committee meeting in March 2007, the past three and half years have seen a lot of activity related to the issue of anesthetic neurotoxicity in children. With the continued support of the SPA, the anesthesia community, and other stakeholders, the ongoing clinical studies should make significant progress in addressing this critical research question.

# Parental Consent by Proxy and Adolescent Assent for Pediatric Cases: Implications for the pediatric anesthesiologist

By Christopher Stemland, MD  
*University of Virginia*

Over the past 50 years, a transformation of medical ethics has brought about an important emphasis on patients' rights for both acceptance and refusal of medical interventions and treatment for both chronic and life-threatening conditions. In pediatric cases, parental consent is sometimes sufficient depending on the age of the child and the nature of the procedure. However, ethical issues may arise where minors who are not emancipated appear mature but do not assent despite parental permission.

This article explores ethical issues relating to obtaining both parental permission and patient assent.

In 1995, Committee on Bioethics of the American Academy of Pediatrics (AAP) issued a statement addressing the issues of obtaining informed consent from pediatric and adolescent patients. The AAP guidelines regarding informed consent for pediatric patients advocate the use of parental consent "by proxy" for medical decisions involving young patients who themselves are unable to make an informed decision. The AAP also acknowledges the potential problems associated with "consent by proxy" including, but not limited to, conflicts of interest, emancipated minors, emergency situations, and disagreement between minor and parent. Accordingly, the AAP also recommends obtaining the patient's



Dr. Stemland

assent wherever possible. The purpose of assent is to emphasize the adolescents' understanding of medical therapy and procedures while ensuring respect for their autonomy.

These guidelines prove very useful in a majority of situations but also leave some questions unanswered. At what point does a child become a rational decision maker and hence require assent for anesthesia in addition to parental consent by proxy? When can an adolescent patient refuse medically-necessary treatment? Are the considerations different for life-saving treatment vs. non-lifesaving interventions?

In the event of a pediatric patient's dissent (or refusal to give assent), pediatric caretakers must determine whether the patient's dissent is binding (ethically and/or legally). The situations in which patients are considered "emancipated," either fully or partially is governed by statute and may vary from state to state. However, in 1995, a Committee on Bioethics generally describes potential types of emancipation as follows:

First, certain minors are deemed 'emancipated' and treated as adults for all purposes. Definitions of the emancipated minor include those who are: 1. self-supporting and/or not living at home; 2. married; 3. pregnant or a parent; 4. in the military; or 5. declared to be emancipated by a court. Second, many states give decision-making authority (without the need for parental involvement) to some minors who are otherwise unemancipated but who have decision-making capacity ('mature minors') or who are seeking treatment for certain medical conditions such as sexually transmitted diseases, pregnancy, and drug or alcohol abuse.\*

*Continued on page 9*

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## President's Message, from page 3

to and including today. Dr. Aubrey Maze helped establish the standards of collaboration between academics and private practice within our specialty. Dr. Anne Lynn, serving as the first female president of SPA, helped broaden the representation of SPA in other societies by hosting our first joint meeting with the Japanese Society of Pediatric Anesthesia, while Dr. Frank McGowan served as the lightning rod by leading the charge for board certification of our specialty.

These are only a few of the leaders who have blazed these trails before me; however, I have chosen to single each one of them out for their willingness to help organize a celebration for SPA. My personal thanks to Myron, Aubrey, Anne and Frank for your ongoing commitment and support of the SPA. With the guidance and support of Nancy Glass (Chair) and the remainder of the Education Committee members, Wendy Binstock (Program Chair) is actively preparing a wonderful day of educational activities to reflect back on the accomplishments of our specialty and society over the last 25 years.

Our next Annual Meeting will be held on Friday October 14th, 2011 in Chicago and we have decided to host a 25th Anniversary Gala Celebration to follow our annual meeting. More details will be provided in the near future. This will be an opportunity for all

those committed to the perioperative care of children to come together and celebrate our successes and plan for the future.

Our celebrations of our first quarter century of service to children in the perioperative environment will not end that evening. In fact, we are planning a year long celebration that will culminate with our hosting of the first International Assembly of Pediatric Anesthesia. This 2-day meeting will be held immediately prior to the ASA meeting in Washington, DC in 2012. We will gather at the Marriott Wardman Park Hotel on October 10-12, 2012 with pediatric anesthesia colleagues from around the world to broaden our efforts to improve the care of children in the perioperative environment.

Lastly, it is truly a significant responsibility to serve as an elected representative of the membership. The Board and I serve at YOUR WILL. Please feel free to contact any one of us if we can do something different or better. We have thrived as a Society through the generous contributions of the voluntary time and effort of the membership. I would like to encourage anyone with the will and desire to join the charge.

I look forward to seeing you all at our next meeting Sheraton San Diego Hotel and Marina on March 31 – April 3, 2011.



## Parental Consent, from page 8

Virginia addressed the issue of pediatric assent in 2007, by passing "Abraham's Law," in which it determined that fourteen is old enough for a patient with life-threatening conditions to contribute to medical decisions. The case involved a mature fourteen year old pediatric patient who, along with his parents, refused potentially life-saving chemotherapy for lymphoma in favor of prayer and herbal remedies. Widespread concern for the patient, Abraham Cherrix, developed into a legal battle that questioned whether undue parental influence over Abraham represented neglect. In this case, a judge threatened to remove Abraham from his parents and require that Abraham receive potentially life-saving treatment against his wishes. Ultimately, a compromise was reached whereby the parents could maintain custody provided Abraham received radiation therapy under the supervision of an oncologist.

"Abraham's Law" supports parental and adolescent rights to refuse medically necessary treatment for patients 14 and older provided the patient is mature, alternative treatments have been considered, and that the decision is made jointly in the best interests of the child. Abraham's Law represents a victory for adolescent and parental autonomy in refusing life-saving and medically necessary treatment.

However, Abraham's Law does not clear up many other ambiguities that arise regarding pediatric assent. What about adolescent patients who refuse to provide assent for elective procedures despite parental consent by proxy. In the absence of medical necessity, a majority of pediatricians and medical ethicists would advocate obtaining assent from all adolescent patients and many older children for routine cases. But if the patients refuse to assent, the Committee on BioEthics stated:

A patient's reluctance or refusal to assent should also carry considerable weight when the proposed intervention is not essential to his or her welfare and/or can be deferred without substantial risk.\*

Pediatric anesthesiologists are frequently faced with older children and young adolescents who refuse these elective procedures even though the child articulates a reasonable understanding of the nature of the surgery. In some instances, preoperative anxiety may be utilized to rationalize proceeding despite failure to obtain assent from these frequently uncooperative and combative patients. In these situations, sedative hypnotic and anesthetic agents administered to reduce preoperative anxiety in patients refusing surgery may be no different than pharmacological restraint against a child's will. Fortunately, in the vast majority of cases, pediatric patients refuse assent simply because the hospital or surgical center represent an unfamiliar environment and they are understandably fearful.

However, ambiguous cases may arise whereby pediatric and young adolescent patients refuse procedures without a clear medical necessity and for unclear reasons as illustrated in the following true scenario. I was recently involved with a case of a 13 year old girl, 8 weeks pregnant, presenting for dilatation, curettage, and evacuation. Accompanied by both mother and grandmother, the patient appeared quite disinterested and our preoperative nurses helped put her gown on after 15 minutes of compassionate en-

couragement. In the obstetrical clinic the day before she tolerated blood draws but now refused intravenous placement by multiple nursing and anesthesia providers. After spending almost an hour with her in both the presence and absence of her family, the reasons for her refusing the intravenous were unclear. Could her refusal be explained by acute anxiety, agitation, or fear of needles common in this age group? Or was she responding to parental coercion but afraid to articulate her refusal to undergo D, C&E for fear of consequences unknown to the health care providers? Was her refusal of the intravenous due to needle phobia? Or, was she expressing

her autonomy and refusing to proceed with the abortion despite the wishes of her mother and grandmother? In the absence of her family, she would nod when asked if she wanted the procedure but was unable to verbalize her assent. She became anxious, uncooperative, and combative any time an intravenous or needle was in view.

Ultimately, I cancelled the case for another day due to my concern that pharmacologic restraint with intramuscular ketamine could represent an assault on this child's autonomy. I discussed the case with her obstetrician and recommended referral

to obstetrical social services and child protective services for help with sorting through the unclear issues. In the end, when these issues were sorted through outside of the operating room, the child did have a needle phobia that was successfully addressed by the anesthesia team and she ultimately assented to and underwent the procedure.

This example and others clearly illustrate the issues that may be presented in this challenging group of patients that often result in more questions than answers but still have significant legal and ethical implications.

*\*Informed Consent, Parental Permission, and Assent in Pediatric Practice, Committee on Bioethics. Pediatrics, 1995; 95; 314-317*

### General references:

Informed Consent, Parental Permission, and Assent in Pediatric Practice, Committee on Bioethics. Pediatrics, 1995; 95; 314-317

American Academy of Pediatric Task Force on Pediatric Research, Informed Consent, and Medical Ethics. Consent. Pediatrics, 1976; 57: 414-416

Mercurio, MR. Journal of Pediatric Endocrinology & Metabolism, 21, 3-6 (2008)

VA Code 63.2-100, et. seq. (2007)

VA Code 32.1-162.18

American Academy of Pediatrics Committee on Bio-ethics. Guidelines on forgoing life-sustaining medical treatment. Pediatrics 1994; 93: 532-536

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## 2011

### February 11-13: Anaheim, California, USA

49TH Clinical Conference in Pediatric Anesthesiology  
Tel: (323)-361-2262; Fax: (323)-361-1001  
Information: Tivi Ortiz, Manager and Program Coordinator, Pediatric Anesthesiology Foundation, Children's Hospital, Los Angeles, Department of Anesthesiology, 4650 Sunset Blvd, Mailstop #3, Los Angeles, CA 90027  
[www.pac.chla-accm.org](http://www.pac.chla-accm.org)

### February 23: Manila, Phillippines

Asian Society of Paediatric Anaesthesiologists Annual Meeting  
Information: ASPA Secretariat, Department of Paediatric Anaesthesia, KK Women's and Children's Hospital  
100 Bukit Timah Road, Singapore 229899  
[www.aspa-2000.com/meetings.html](http://www.aspa-2000.com/meetings.html)

### March 13-17: Sydney, Australia

6th World Congress on Pediatric Critical Care  
Tel: +61 292650700, Fax: +61 292675443  
Information: 6th World Congress on Pediatric Critical Care Congress Organizers, GPO Box 128, Sydney, NSW 1001, Australia  
[www.pcc2011.com](http://www.pcc2011.com)

### March 31-April 3: San Diego, California, USA

Society for Pediatric Anesthesia (SPA)/American Academy of Pediatrics (AAP) 2011 Winter Meeting  
Tel: (804)-282-9780, Fax (804)-282-0090  
Information: Society for Pediatric Anesthesia, 2209 Dickens Rd., Richmond, VA 23230-2005  
[www.pedsanesthesia.org](http://www.pedsanesthesia.org)

### May 18-20: Torquay, Devon, United Kingdom

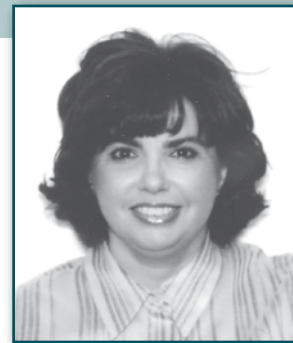
Association of Paediatric Anaesthetists of Great Britain and Ireland Annual Scientific Meeting  
Tel: +44 (0) 20 7631 8887, Fax: +44 (0) 20 7631 4352  
Information: APA Association of Anesthetists, 21 Portland Place, London, W1B 1PY  
[www.apagbi.org.uk](http://www.apagbi.org.uk)

### May 22-24: Minneapolis, Minnesota, USA

Society for Pediatric Sedation Conference 2011/Sedation Provider Course  
Tel: (804)-565-6354, Fax: (804)-282-0090  
Information: Society for Pediatric Sedation, 2209 Dickens Road, Richmond, VA 23230-2005  
[www.pedsedation.org](http://www.pedsedation.org)

### May 25-29: Chicago, Illinois, USA

5th Annual Pediatric Anesthesia Update + ACLS/NRP + PALS + Ultrasound Guided Regional Anesthesia and Vascular Access Workshop  
Tel: (800)-222-6927  
Information: Northwest American Seminars, P.O. Box 2797, Pasco, WA 99302  
[www.nwas.com](http://www.nwas.com)



Helen V. Lauro, MD, MPH, FAAP  
*Long Island College Hospital,  
Brooklyn, NY*

### June 17-19: Aurora, Colorado, USA

Sixth International Symposium on the Pediatric Airway  
Tel: (720)-777-4444, Fax: (720)-777-7158  
Information: Heather Christensen, Conference Coordinator and Education Center, 13123 E. 16th Avenue, Box 175, Anschutz medical Campus, Aurora, CO 80045  
[www.pedsairwaysymposium.org](http://www.pedsairwaysymposium.org)

### September 21-23: Cambridge, United Kingdom

PCICS Europe 2011 Scientific Meeting  
Tel: +44 (0) 1794 511331/2, Fax: +44 (0) 1794 511455  
Information: PCICS Europe 2011 Conference Secretariat, c/o Index Communications Meeting Services, Crown House, 28 Winchester Road, Romsey, Hampshire, SO51 8AA, UK

### September 22-24: Palma de Mallorca, Spain

3rd Congress of the European Society for Paediatric Anaesthesiology  
[www.euroespa.org](http://www.euroespa.org)

### October 13-16: White Point, Nova Scotia, Canada

International Forum of Pediatric Pain  
Telephone: (902)-240-3996  
Information: Centre for Pediatric Pain Research, IWK Health Centre, 5850/5980 University Avenue, P. O. Box 9700, Halifax, NS, B3K 6 R8, Canada  
[www.pediatric-pain.ca/content/IFPP](http://www.pediatric-pain.ca/content/IFPP)

### October 14: Chicago, Illinois, USA

Society for Pediatric Anesthesia (SPA) 25th Annual Meeting and Gala Celebration  
Tel: (804)-282-9780, Fax (804)-282-0090  
Information: Society for Pediatric Anesthesia, 2209 Dickens Rd., Richmond, VA 23230-2005  
[www.pedsanesthesia.org](http://www.pedsanesthesia.org)

## October 20-23: Queensland, New Zealand

Society for Paediatric Anaesthesia in New Zealand and Australia (SPANZA)/Australian & New Zealand Association of Paediatric Surgeons (ANZAPS) Conference  
Tel: +61 2 4973 6573, Fax: +61 2 4973 6609  
Information: SPANZA Secretariat, P.O. Box 180, Morrisset, New South Wales, Australia 2264  
[www.spanza.org.au](http://www.spanza.org.au)

## November 2-5: Hannover, Germany

22nd European Society of Paediatric and Neonatal Intensive Care (ESPNIC) Medical and Nursing Annual Congress 2011  
Tel: + 41 22 908 0488 Fax: + 41 22 906 9140  
Information: ESPNIC Administrative Office, c/o Kenes International, 1-3 Rue de Chantepoulet, P.O. Box 1726, CH-1211, Geneva 1, Switzerland  
[www.espnic.de](http://www.espnic.de)

## November 4-6: Toronto, Canada

Pediatric Anesthesia Conference  
Tel: (416)-813-7445, Fax: (416)-813-7543  
Information: Elizabeth McLeod, Shue Lin Loo, The Hospital for Sick Children, Department of Anesthesia, 555 University Avenue, University of Toronto, Toronto, Canada M5G1X8  
[www.events.cepdtoronto.ca/website/index/ANS1110](http://www.events.cepdtoronto.ca/website/index/ANS1110)

# 2012

## February 23-26: Tampa, Florida

Society for Pediatric Anesthesia (SPA)/American Academy of Pediatrics (AAP) 2012 Winter Meeting  
Tel: (804)-282-9780, Fax (804)-282-0090  
Information: Society for Pediatric Anesthesia, 2209 Dickens Rd., Richmond, VA 23230-2005  
[www.pedsanesthesia.org](http://www.pedsanesthesia.org)

## October 10-12: Washington, D.C., USA

International Assembly of Pediatric Anesthesia  
Tel: (804)-282-9780, Fax (804)-282-0090  
Information: Society for Pediatric Anesthesia, 2209 Dickens Rd., Richmond, VA 23230-2005  
[www.internationalassembly2012.org](http://www.internationalassembly2012.org)

# 2013

## February 17-22: Cape Town, South Africa

6th World Congress of Paediatric Cardiology & Cardiac Surgery  
Tel: +27 21 532 6333, Fax: +27 21 532 6331  
Information: PCCS Conference Secretariat, Global Conferences, P.O. Box 632, Howard Place, Pinelands 7450  
[www.pccs2013.co.za](http://www.pccs2013.co.za)

## October 11: San Francisco, California, USA

Society for Pediatric Anesthesia (SPA) 27th Annual Meeting  
Tel: (804)-282-9780, Fax (804)-282-0090  
Information: Society for Pediatric Anesthesia, 2209 Dickens Rd., Richmond, VA 23230-2005  
[www.pedsanesthesia.org](http://www.pedsanesthesia.org)

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Please forward all information concerning congresses relevant to Pediatric Anesthesia to:

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- Area of interest or expertise

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