BEHIND THE DOUBLE DOORS
Nursing in the OR and PACU
Our 5th issue of the UC San Diego Medical Center Journal of Nursing allows us behind the closed double doors of the OR and PACU. With the new Sulpizio Cardiovascular Center opening next Spring, which will offer 4 new Cardiac sized OR’s and a new Pre and Post Treatment Unit (PTU formerly known as PACU), it is a perfect time to find out more about Perioperative Services and the extraordinary staff that work in this area.

Our Perioperative team is known around the world for the management of PTE (Pulmonary Thromboendarterectomy) cases, advances in Burn Surgical Care, our humanitarian efforts, and the ability of our staff to provide patient/family centered care. It is truly remarkable.

I always enjoy learning more about the specific job responsibilities and the many different roles our staff assume in the OR and PACU. The amount of information these staff members have to comprehend is astounding. The article covering a day in the life of a transplant coordinator was fascinating as I learned about the many aspects of care that had to be coordinated in order to ensure a successful transplant. I was overwhelmed with pride when I read the article about the way the staff in the OR act as educators to the patients, families and students who come through our Operating Rooms. Not only do the Clinical Educators take part in the teaching of the patients and students but the whole team seems to embrace this culture. I was also very interested to read about the burn victims and the many procedures they endure while under our care and how the rooms are adjusted to make these patients more comfortable and to help eliminate any more trauma to their bodies.

The story about the special surgical caps for children really warmed my heart. Making a scary situation more inviting and fun for the young patient is a challenge and hearing about what the staff are doing at the Shiley Eye Center is just another example of how we not only meet but exceed our patients expectations. I was also excited to read that the OR also offers a special bring your child to work day which includes many opportunities to have a hands on experience! What a great way to introduce this field of work to the next generation!

These stories share just a glimpse of what happens behind the scenes in our OR’s and PACU’s. I encourage you to read each article and learn more about our Perioperative Team and the services they provide.

Sincerely,
Margarita Baggett RN MSN
Chief Nursing Officer

Magnet Forces

1. Quality of Nursing Leadership
2. Organizational Structure
3. Management Style
4. Personnel Policies and Procedures
5. Professional Models of Care
6. Quality of Care
7. Quality Improvement
8. Consultation and Resources
9. Autonomy
10. Community and Hospital
11. Nurses as Teachers
12. Image of Nursing
13. Interdisciplinary Relationships
14. Professional Development

From the Nursing Shared Governance Council

Magnet committee membership is a great way to become personally involved in the Magnet journey and to help shape the future of nursing at UCSD. For more information go to our nursing website at http://medinfo.ucsd.edu/nursing/committees/ to learn about committee membership opportunities.

Message from the
The Chief Nursing Officer

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40 We proudly recognize
If you are a nurse who thrives on innovative technology and is a multi-tasking machine, then the operating room environment may be the perfect place for you! Our surgeons like toys, lots of very expensive, technical toys! Come on in…take a peek into our world!!

Operating room nursing has evolved into a very complex practice, especially over the past two decades with the advent of advanced technology. It takes a minimum of two years for nurses to familiarize themselves with all the surgical procedures and specialties. U. C. San Diego Perioperative Services boasts four locations: Hillcrest Hospital, Hillcrest Outpatient Surgery, Thornton Hospital, and the Shiley Eye Center. These four sites provide a total of 25 operating rooms that cover all surgical services. As a group, we performed approximately 16,000 cases during the last fiscal year totaling 37,000 operating hours. Surgical specialties at our facilities include: Solid Organ Transplant, Cardiac, Burn, Neuro, Head and Neck, Orthopedics, Spine, GYN, Plastics, General (including minimally invasive and robotic), Pulmonary Special Procedures, Vascular, Urology, and Ophthalmology.

Each morning we meet for report. After reviewing any pertinent case information and departmental updates, we prepare for our cases. A typical day includes the following:
• Interview, assess, and check patient; review lab results, consents, paperwork etc.
• Check case cart and preference cards (which list instruments and supplies required for surgery).
• Confer with anesthesia.
• Prepare room for surgery with our surgical technologist partners verifying instruments, loaner sets, supplies, and equipment; open for case.
• Patient is brought to operating room by anesthesia personnel by 0720.
• Perform surgical pre-brief in the OR suite when attending arrives.
• Assist anesthesia with induction.
• Attend to needs of surgeon, surgical technologist and anesthesia provider throughout the case.
• Document all pertinent information in the electronic medical record.
• Perform sponge, needle, and instrument counts.
• Manage blood products, blood gases, frozen sections, and specimens.
• Notify front desk when closing to call for next patient.
• Call report to PACU and accompany patient during transport.

Each one of us has a specialty. We become the clinical expert, liaison, and resource person for that specialty service. Technology advances more quickly than we do (daily!). As a result, OR nurses and technicians are no longer considered experts in

Kathleen Thompson RN, MBA, BSHA, CNOR is the Assistant Director of Perioperative Services at UC San Diego. She has 33 years of experience in perioperative service. She spent the first 15 years of her nursing career as a clinical nurse in the operating room before entering the management arena.
every case. To meet this challenge, we develop core people to function as service coordinators in each specialty, but each nurse must know enough to rotate through the weekend shifts. We really need to know a lot; here is a little glimpse into a few of our specialties.

We perform a lot of orthopedic surgery. At Hillcrest, the Ortho Trauma Room is filled each day with 'add on' cases that present the day before; in addition, we perform many total joint replacement surgeries. Orthopedics has become progressively more complicated over the years. As you know, it deals with the fixation of bones (206 to be exact) that requires us to develop a strong base knowledge of both the equipment and the multiple instrument sets we use to perform surgery. We have specialists that are well versed in every procedure we do (photo 1, 2). Once our patient is situated and the procedure is in progress, we need to document every detail of the care we give. For these specialty cases, this includes documenting every nail, screw, and plate in the electronic perioperative record. We need to cite serial number, lot number, type, company, size, and quantity for each item; we can use up to 20 implants per case (photo 3, 4).

Another of our specialties is spine surgery. Setting up for spinal surgery entails opening as many as twenty different sets of instruments and a multitude of supplies (photo 5, 6). The patient is placed on a unique operating room bed that accommodates positioning to allow for direct exposure of the spine (photo 7). Since space is a rare commodity in our rooms, we have developed towers to house many pieces of our electrical equipment such as our spinal tower (photo 8).

Advanced, innovative technology is ever present in our arena. Robotic minimally invasive surgery is being used by more and more surgical specialties including General Surgery, Urology, and GYN. Each million-dollar robot takes on a life of its own; we have three Da Vinci Robots that work in this way:
- The robotic telescope has two lenses, one for each eye; this provides the surgeon with 3-D vision.
- The gray light cable has two extensions, one for each telescopic lens (photo 9).
- The scrub tech and circulating nurse drape the camera and perform the scope alignments.
- The robotic arms are then 'docked' and connected to the ports placed in the patient's abdomen while the surgeon sits at a console in the room and operates the robot remotely...
- It takes a 'Village' to do a robotic case... Once this colossal machine is moved into place, its multiple arms need to be accurately positioned and draped in a sterile fashion and a wide array of instruments and supplies need to be opened and set up on a sterile table (see photo 9, 10)

Need a new liver?? Transplant surgery requires a highly specialized team of nurses and surgical technicians that cover the service 24/7. In addition, for liver transplants we have a second circulating nurse in the room to ensure blood can be checked and given in a timely manner. We may use in excess of 200 units on any given case. We perform heart/lung, liver, kidney, pancreas, and cornea transplants. There are strict protocols we must follow for all organ
transplant procedures, so we work in concert with our Lifesharing partners to ensure strict compliance with all regulatory requirements.

Since UCSD functions as the regional burn center for San Diego, we have developed a highly skilled surgical team devoted to the care of critically ill burn patients; we carefully monitor every aspect of their care. Fluid management is of the utmost importance as we debride and graft these patients to support their survival. Grafting is a specialized procedure most commonly used for this population of patients. We use different grafting products based on patient need and the severity of the burn; they may include allo, auto, transcyte matrix of bovine tendon collagen, and porcine. When auto grafts (using the patient's own skin) are the treatment of choice, we need to expand the tissue to provide a firm surface for the split thickness skin graft harvesting (photo 11). This is done by injecting fluid that contains a vasoconstrictor under the skin and is referred to as a 'tumescent' procedure.

Our knowledge base is multidimensional and exceeds the parameters of actual surgical procedures. To perform our roles effectively, we need a basic understanding of multiple entities. It is our job to point out things that may adversely affect patient outcomes and prevent them. We need to be familiar with the sterile processing area and all that it entails, especially the cleaning and processing of instrumentation. Ongoing construction projects complicate our lives, but the outcome will be worth it!! We are under construction at the present time to provide a larger work area and improve storage capacity for our Sterile Processing Department. We have literally thousands of sterile supplies, instruments, needles, and specialty items (photo 12, 13); one entire wall in our storage room is dedicated exclusively to suture alone (photo 14)! We have an extensive variety of choices including Silk, Chromic, Nylon, Monocryl, PDS, and Vicryl; there are 251 combinations on the wall with various size needles. Equipment?? That is the never ending story….

Our world is ever changing, but our core remains the same: the patient is the heart of our practice. All of us work together as a team, a family actually, to provide the finest patient care possible. We strive to do our best every day to make a difference in someone's life and promote excellent surgical outcomes. We have our obstacles and challenges, but seem to find a way to overcome them together. We recognize that we need to take our jobs, but not ourselves too seriously………and we love what we do! photos 15,16,17,18,19)
Because positioning problems can result in significant injuries and lawsuits, knowing what can go wrong with patient positioning and how to prevent it can help eliminate both. Our 2010 Performance Improvement project is preventing unit acquired skin injuries. Quality Variance Reports are monitored for any occurrences that are unit acquired. We then use this data to revise and improve our positioning techniques in order to prevent recurring injuries.

Proper positioning ensures that the surgical team has ready access to the patient and a clear view of the surgical site, while minimizing potential risk to the patient. It reduces bleeding, mostly by avoiding venous congestion, minimizes cardiac and respiratory problems and decreases the risk of pressure-related damage to the skin, nerves, joints, and muscles. Proper positioning techniques, used with proper supportive equipment and devices, contribute to patient safety according to the Association of Perioperative Registered Nurses (AORN, 2008).

Positioning the anesthetized patient must be done with more diligence because these patients cannot make others aware of compromises due to excessive pinching, shear or friction caused by improper positioning or lack of sufficient padding.

There are many factors to consider in planning how best to keep patients safe. In addition to knowing what type of procedure is scheduled, how long it will last, and what type of anesthesia will be administered, the team needs to determine whether any equipment that could affect positioning will be used—and to identify patients at high risk. We note the patient’s age, height, and weight. Obese individuals face a greater likelihood of nerve and pressure point skin injuries while older people tend to have less flexibility and decreased peripheral circulation than their

Operating Room Performance Improvement project—2010

By Netta Cohenca RN, BSN, RNFA, CNOR

Netta Cohenca RN, BSN, RNFA, CNOR
Perioperative Nurse Educator. Netta graduated from San Diego State University in 1982. She participated in the UCSD Postgraduate Perioperative training class of 1984, after which, she became an employee here. Previous clinical surgical specialties include Cardiothoracic and Neurosurgery.
younger counterparts, making them more susceptible to nerve injury (Rothrock, 1999).

There are many devices on the market to aid in safely positioning patients and the surgical team must have a working knowledge of what is available and how it is used. Ideally, any materials used for positioning, especially padding, should be able to absorb compressive force, redistribute pressure, prevent excessive stretching, and provide support for optimum stability. Studies suggest that positioning devices should maintain normal capillary interface pressure of 32 mm Hg or less (Rothrock, 1999).

After positioning patients about to undergo a procedure, the team must take time to evaluate body alignment and tissue integrity. The ulnar bone and the lumbar area are checked because they’re especially vulnerable. Tubes and lines are also monitored to assure that they are not causing undue pressure, not just at the beginning, but throughout the procedure. We look at the patient’s eyes, ears, and nose to ensure that they’re not being pinched.

After the procedure, an assessment is performed to examine any areas that were under direct pressure and to check for signs of skin injury. As soon as the patient is alert, he or she is asked if any numbness or tingling is being experienced in the extremities as this is a sign of possible nerve damage.

All preexisting conditions and postoperative findings are documented by the Circulating RN. Documentation includes nursing assessments and interventions before, during, and after the procedure. Additionally, any alterations in skin integrity are part of the hand-off communication to the PACU RN.

Since 2008 UCSD nurses have been collecting data on hospital acquired pressure injuries. Additionally UCSD participates in the quarterly CalNoc survey which collects data from other like hospitals and compares results.

References


Thornton Hospital has a 7 suite Operating Room. Since 1993 many innovative surgical procedures have been performed. We currently do 4,700 surgeries a year. The volume of surgeries and demand for O.R. time has grown in the last decade.

Surgical specialties range from minimally invasive procedures using two Da Vinci® robotic systems to an expanding Cardiothoracic Service which includes the PTE program, Cardiac Transplantation and devices for cardiac support, including left ventricular assist devices (LVADs) for destination therapy. Additionally, the academic environment has expanded the types and variety of surgical interventions to include the latest total joint orthopedic procedures, complex plastic reconstructive and head and neck surgeries, major complex spine and neurosurgical interventions, advanced Gynecological surgeries and a fast growing Urology service.

Our staff is comprised of OR nurses and Surgical Technologists who take pride in the ongoing learning required by the performance of these very challenging surgeries. The team is continuously engaged and collaborates with physicians to bring an evidence-based perioperative nursing practice at its best.

Our growth continues with the opening of San Diego’s first comprehensive cardiovascular center — the Sulpizio Cardiovascular Center — in April 2011. This new facility will add four more Operating Rooms to the current ones at Thornton.

Maria Camilon, RN, MSN, CNOR became the Assistant Director of Perioperative Services La Jolla Campus this year. She received her BSN from the University of Santo Tomas, Philippines and her MSN from the University of Phoenix. She has worked at UC San Diego since 1986, first as a Clinical Nurse III Hillcrest Main OR, with specialty in Cardiothoracic Surgery. She became the Clinical Educator of the Hillcrest OR in 2005 and Thornton OR Nurse Manager in 2006.
Living with Pulmonary Hypertension (PH) can be very difficult. This disease ranges along a wide continuum from mild shortness of breath on exertion, to severe dyspnea and oxygen dependency with complete debilitation. Previously active individuals are severely hampered in their abilities to go on with life as they were used to living it, and therefore they seek surgical intervention as a cure.

Pulmonary hypertension is a rare condition of high blood pressure in the blood vessels of the lungs. Over time, the progression of the disease causes large clots that block the pulmonary artery system. This leads to decreased blood flow in the pulmonary vasculature causing alterations in lung function. Additionally, the back pressure caused by these clots places increased pressure on the right side of the heart leading to increase in size and decrease in functional ability. The right side of the heart can become so enlarged and weakened that it eventually fails, leading to poor quality of life and eventually death (Gaine, 1998). Figure 1.

Preoperative workup:
At the point when medical management has been unable to adequately manage symptoms, our patients begin their journey to UC San Diego for medical workup to assess if they meet the criteria for surgical therapy. The following are criteria for surgery (Thistlethwaite, 2006).
• A calculated pulmonary vascular resistance above 300 dynes/sec/cm-5 (normal value is 100 to 250 dynes/sec/cm-5).
• Pulmonary Hypertension with evidence of surgically accessible pulmonary thrombus on pulmonary angiography
• an absence of significant coexisting non-cardiac disease

Diagnostic testing often begins several months before surgery. Patients undergo a multitude of routine diagnostic tests (physical, CBC, urinalysis, ECG, etc), in addition to pulmonary-specific testing, including:
• Impedance plethysmography (measures small changes in electrical resistance of the chest, calf or other regions of the body. These measurements reflect blood volume changes, and can indirectly indicate the presence or absence of venous thrombosis)
• Venous duplex evaluation (a test using ultrasound that evaluates the flow of blood through the veins in the arms or legs)
• Ventilation/perfusion scan (looks at the ability of air to reach all parts of the lungs, while the perfusion part evaluates
how well blood circulates within the lungs
- Pulmonary angiography (Pulmonary blood vessels are x-rayed to detect pulmonary thromboembolic disease)
- Coronary angiography (for patients >45 years of age)

As the pulmonologists are determining whether a patient is a surgical candidate, it is important for them to differentiate between chronic and acute pulmonary thrombus. The respective pulmonary angiographic findings are different (Fedullo, 2001) and therefore it is critical to determine that a true endarterectomy is what the patient needs and not just an embolectomy (Jamieson, 2003).

**Surgical Treatment:**

On the day of surgery the patient is brought to the operating room. A median sternotomy is performed. Full cardiopulmonary bypass is instituted with a high aortic and two vena cava cannulae. A temporary pulmonary artery (PA) vent is placed and patient cooling is begun. One of the most important aspects of this surgery is cooling the patient to 20ºC. Doing this lowers the basal metabolic rate (BMR - the minimum caloric requirement needed to sustain life in a resting individual) thus providing protection to the vital organs and brain. Cooling is achieved with a head and heart cooling jacket and a full body cooling blanket placed under the patient. These jackets continuously circulate very cold saline to keep the surrounding tissues at the required temperature. Cooling a patient takes approximately 45 minutes, depending on their size (Thistlethwaite, 2008).

When the patient has reached the desired degree of hypothermia, the heart goes into ventricular fibrillation. An additional vent (a small tube which allows the escape of excess blood) is placed in the left atrium to prevent heart distention from the large amount of bronchial blood flow which is often seen in these patients. Circulatory arrest is initiated along with exsanguination of blood from the heart via the cardiopulmonary bypass machine, creating a bloodless field required for the surgery (Long, et al, 1994).

A self retaining retractor (Blunt Cerebellar) is placed in the region of the right pulmonary artery and an incision is made into the vessel. Any loose thrombus is removed at this time. Using long forceps and a hollow ball-tip dissection instrument specifically designed for this surgery, the endarterectomy is begun. This special instrument eliminates the need to stop dissection to suction blood from the operative field thus reducing circulatory arrest time which results in improved patient outcomes (Long, et al, 1994).
Gentle sweeping motion and traction/counter-traction is used to separate the endarterectomy specimen from the vessel wall. (Figure 2)

The surgeon extracts the left and right endarterectomy specimens separately. Each lobar branch of the PA appears in the specimen (Figure 3). It is important that the specimen from each branch of the PA is freed until it ends in order to be certain that there is no further obstruction (Thistlethwaite, 2008).

After both sides of the PA have been endarterectomized, the cooling jacket is removed from the heart and the head, cardiopulmonary bypass resumes and the rewarming of the patient begins. The blanket beneath the patient now begins to circulate warm fluid. It takes approximately 90 minutes to rewarm patients to the desired rectal temp of 36°C. If any other cardiac procedures are necessary (i.e. CABG, MVR, etc.) they are done during the rewarming period. At the completion of rewarming, cardiopulmonary bypass is terminated and chest closure follows usual routine.

The surgeon now lays out the specimen as it appeared in situ (Figure 3). The specimen is analyzed and photographed for research purposes and is then sent to pathology (Long, 1994).

**Some Statistics:**

The average length of the operation is 6.5 hours. The median stay in the SICU is 4 days. The median hospital stay is 10 days. The surgical mortality rate 4.7% (Thistlethwaite, 2008).

**The Nursing Perspective:**

This surgery poses challenges for the operating room nurse on many levels. First, the nurse realizes that this subset of patients are often critically ill and have little pulmonary reserve. The surgery has to be expedited in a very methodical and organized manner to minimize the patient’s anesthesia time.

The morning of surgery, the patient and family are met in the preoperative holding area. The chart is checked, verified and rechecked for all the vital components required to insure that the correct surgery is performed on the correct patient. Consent, informed consent, blood consent, updated history and physical and current lab values are all verified with the patient. Any questions that may linger for the patient and family are answered at this point.

When all these components are in place and the surgeon has arrived in the operating suite, the patient is then taken to the operating room accompanied by the circulating RN and the anesthesia care provider.

Patients are entering an environment that is cold and foreign to them. Their anxiety increases when the doors of the operating room are opened and they enter the room. At this point, it becomes important for the nurse to provide a warm blanket and stay close by, often times holding the patient's hand as they drift under anesthesia.

The operating room team consists of the anesthesia attending and resident, the anesthesia monitoring technician, the perfusionist, the scrub person (technician or RN), the circulating RN, the surgeon and surgical assistant. They now begin a well choreographed and rhythmic “dance” that is performed efficiently, quickly and quietly. The team has worked together for many years and each member is well versed in his or her role during this “dance”. Visitors often comment on how so much can be accomplished with so few words being uttered.

All the intravenous lines and catheters are now inserted. The patient is placed in the surgical position which includes a shoulder roll placed (to extend the chest) and arms carefully...
padded and tucked at the sides.

On one side of the room the perfusionist readies the cardiopulmonary bypass machine by connecting the many tubes, connectors, filters and valves together. This network of what appears to be tubing “spaghetti” will keep the patient at the desired temperature and will drain blood from the body via the vena cava and, after oxygenation, return it to the patient via the aorta.

On the opposite side of the room the scrub person is organizing vast numbers of instruments required to perform this complicated surgical procedure. There is a sternal saw used to split the sternum in half lengthwise, making it possible to access the heart. There are several retractors used to make it possible to visualize inside the deep cavity of the chest. There are clamps that are used to hold bleeding vessels closed until they can be sewn shut or electrocauterized (closed shut using electrical energy). There are specialized and extremely delicate needle holders used for the fine, 13mm, needles used to sew the pulmonary artery closed. There is a sterile slush machine which will keep ice and cold saline on hand to be used to cool the heart. These are a few examples of the necessary instruments found on the eight foot sterile covered table used during this surgery.

The circulating RN takes a leading role in the choreographed “dance”. His or her finger is on the pulse of all the activities occurring during the surgery. It is the role of the circulating RN to ensure that events of surgery happen smoothly and to anticipate the needs of the entire team. Patient advocacy and safety are foremost on the mind of the circulator. Their duties range from assuring sterility in the operating room, to checking blood with the anesthesia provider, to counting instruments, needles and sponges with the scrub person, to sending labs and blood gases for the perfusionist, to coordinating with the SICU for postop care. These are a few of the many tasks which the RN performs during the surgery.

After the procedure, the RN circulator ensures safe transfer of the patient from the operating table to the ICU bed and escorts the patient to the next phase of their recovery in the SICU. A verbal handoff is conducted with the receiving ICU RN and the critical details of the surgery are reviewed together.

As the nurse leaves the patient in the ICU there is the great hope that this patient will do well in their post-operative course. We anticipate that with this curative surgical procedure we will be able to help this individual regain their health, feel better, and recover some of the previous vitality in their life.

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Patricia A. Thistlethwaite, MD, PhD, Aaron Kemp, BA, Lingling Dr, MD, Michael M. Madani, MD, and Stuart W. Jamieson, MB, FRCS. The Journal of Thoracic and Cardiovascular Surgery. Volume 131, Number 2. 2006:307-313.s


Operating Room Nurses As Teachers

By Netta Cohenca RN, BSN, RNFA, CNOR

Are you a nurse-or a teacher? Of course, you’re both. Teaching can occur as spontaneous answers to questions from our patients or more formal educating.

As a nursing professional, learning is viewed as a lifelong process essential to the growth and development of clinicians striving to deliver high quality patient care. Nurses are permitted and expected to incorporate teaching in all aspects of their practice. Teaching is one activity that reportedly gives nurses a great deal of professional satisfaction. Early Magnet research revealed that staff nurses strongly value their roles as teacher, developer, educator, mentor, leader and supporter. (McClure,1983).

The UCSD O.R. Nurse is involved in teaching on many levels:

During the new employee orientation nurses take an active role in the shaping of new employees by precepting and mentoring them in their new work environment. We work with the presumption that precepting is everyone’s responsibility. Professional development efforts begin with new employee orientation, designed to provide all employees with the knowledge required to navigate through their initial period of entry into the organization. The mission, vision and values of the organization are disseminated through this process. The ability to provide quality patient care, achieve satisfaction in one’s practice and advance nursing as a profession is based on the opportunities available to learn from one another. The success of a smooth orientation is supported by the nurse manager, the unit staff and the educator.

Unit Educators and staff nurses are also involved in coordinating inservices pertaining to new equipment and supplies as well as educating their peers in important competency knowledge. An example is teaching the staff on how treat patients with Malignant Hyperthermia.

Patients’ health literacy includes the ability to understand instructions, doctor’s directions and consent forms. Health literacy is not simply the ability to read. It requires a complex group of reading, listening, analytical, and decision-making skills, and the ability to apply these skills to health situations. Decrease in Health literacy has a vulnerable population base which may include: elderly (age 65+), minority and immigrant populations, low income (Approximately half of Medicare/Medicaid recipients read below the fifth-grade level) and people with chronic mental and/or physical health conditions. (Glassman, 2004). Health literacy is an important component of patient education. Nurses in the O.R. are responsible for evaluating patients’ comprehension as related to their surgical procedure. Patients with a clear understanding of diagnosis, treatment and recovery are better equipped to cope with illness, make an informed decision and adhere to treatment recommendations. (Glassman,2004). Patient and family learning needs, including cultural preferences, are assessed upon initial admission to the operating room holding area. Acting as a patient educator and advocate, the nurse assesses whether the patient and family have a clear understanding of the surgical procedure. Any lack of understanding or misunderstandings are rectified prior to surgery and before preoperative sedation takes effect.

In addition to the above teaching, our nurses also mentor nursing and surgical technician students from area schools. We have an ongoing relationship with San Diego State University School of Nursing, as well as Southwestern College and Concorde College Surgical Tech training program. These students will come for a day of observation or will spend as much as six months in our unit training for their specialty. The precepting staff engages our adult students as active partners in the planning, delivery, and evaluation of their learning. When job openings are available, our students even become potential new hires.

References


My student experience in the Operating Room

By Deanna Smith, Concorde College Surgical Technologist Student

As I walked through the Main O.R. double doors at UCSD Hillcrest I was eager, energized and anxious all at the same time. It was the first day of my clinical experience as a Surgical Technologist Student and I was fortunate enough to be chosen to be part of such a highly regarded institution. I was unsure of what to expect from my experience.

To my delight, from the time I was introduced to the staff, and throughout my entire stay at UCSD, the Educator, my surgical tech preceptor, and the entire staff were friendly, supportive, and open to my being part of the team. I felt like they really respected me as a student and wanted to ensure that I had the best experience that I possibly could.

My first week in the operating room was intimidating. Some days went perfectly and others not so perfect. But there always was an atmosphere of support and team-building on the floor. I felt comfortable that I could go to any of the staff for advice and direction and that I was a respected member of their team. I was able to learn from every situation I was in.

The surgical technicians and nurses reinforced the education and training that I had received at Concorde College. This provided me with consistency and a sense of well being. I was delighted to see that the entire staff followed AORN standards for the operating room, which I had learned throughout my classes at Concorde’s Surgical Technologist Program. The entire team, from the transport team to the surgeons, showed a high level of patient care and genuine caring for the patient which made me feel like I was gaining the best experience I could.

I felt I had an advantage with the opportunity to have my clinical training at this highly regarded teaching institution. One example is the chance to observe and listen to the Attending Surgeon instruct the Residents on the surgical procedure. The surgeons take great pride in teaching their skills and I was honored to be included in gaining the knowledge they were sharing.

I am confident that my time with the UCSD Peri-Operative team has increased my confidence, skills and knowledge in the surgical technology field and that I am well qualified to be part of an OR team, as I have been taught by the best.
The role of the Surgical Transplant Coordinator to facilitate communication between the Medical Center’s Solid Organ Transplant Coordinators, Internist, Surgeons, Pharmacy, Anesthesiologist, surgical staff team, and the patients’ family members (McNatt, 2008). A look behind the “glazed” glass Operating Room doors, at Hillcrest, you will find an energetic, intelligent, compassionate surgical transplant call nurse coordinator, Renee Pink RN, reviewing the surgical schedule for the day. She has received emails and phone calls from the Solid Organ Coordinators identifying the perspective organ donor and recipient patients, their ABO blood cross match, tissue histology, and medical record identifications. Renee compiles the data and completes the Patient Identification / ABO Verification Cross Match forms Fig 1 and places the documents in the medical record chart of the recipient patient.

Two surgical teams, comprising of a surgical scrub person, circulating nurse, anesthesia resident, and attending, surgeon resident, and attending are assigned to two separate operating room suites in close proximity to each other. Renee Pink RN orchestrates the staff and their assignments with a “Surgeon’s Briefing” for the day Fig. 2. Today’s transplant will be a “living donor” kidney. Living donors may be members of the immediate family, friends, co-workers, even strangers as long as the cross-match ABO blood type are the same for both the donor and recipient, and tissue histology is negative for reactive antibodies.

Janet E. Hofer RN, BSN has nursing degrees from both Grossmont College and from San Diego State University. She has been a nurse since 1975, became an OR nurse in 1983, and joined the OR staff at UCSD in 1999. She is presently Clinical Educator in Perioperative Services, her specialty services include Minimally Invasive Surgery and Robotics. She is the past Clinical Coordinator of Solid Organ Transplants and General Surgery Services.
Renee reviews the recipient's medical record to verify the patient's potassium and glucose are within a normal range. Up to date lab results are a crucial factor in determining the course of action to take for the recipient patient.

Both the donor and recipient patients are transported to the Pre-operative room after completion of their admission process. All required informed consents, history and physical, laboratory data, etc are completed and up to date. Renee and the transplant nursing team review the medical records to ensure the appropriate ABO Verification and tissue cross match forms are present and documented.

The patients and their family members are invited to visit with each other, in the Pre-operative Holding area, prior to the donor and recipient patients' entrance to the Operating Room. Often the donor and recipient are related or know each other well. The family members are given the opportunity to visit and provide support for each other while waiting for the patients to be transferred to the surgical suite, which has led to a favorable response from patients and family and has promoted a positive family centered care environment.

Our Pre-operative process for living donor kidney transplants has changed recently. How did this change come about? In the final quarter of 2009, the O.R. Transplant Nurses observed that the donor and recipient patients were being transferred to the Pre-operative area in a "staggered fashion." The donor would arrive first, be interviewed by the donor surgical team, and transported to the O.R. suite. The recipient patient and team would wait for the “donor” team to give the green light to send and start the recipient surgery. This process is known as “Donor Driven” transplantation. The recipient patient's OR suite was not utilized efficiently and lengthy delays in the surgical start times and cold ischemic times were reported.

The viability of a donor transplanted organ directly correlates with the length of cold ischemia time (Mikhakski, 2008 and Warle, 2010). Shortened ischemic times result in better recipient response with respect to both short term and long viability of the organ.

Renee and the transplant team were very concerned with the "cold ischemic times," for the living donor kidney and for the recipient, which they knew were exceeding an hour. Cold ischemia is described as the amount of time the kidney organ is not perfused with blood. It begins when the donor kidney is cross clamped stopping all blood flow into to and out of the organ. Once the organ is removed, from the donor, the surgical team quickly flushes the kidney, removing the donor's blood, with an iced solution, known as UW, designed for tissue preservation. The kidney is then placed on an ice bath of 0.9% Normal Saline, sterile drapes are applied with aseptic technique, in preparation for transport to the recipient patient's OR suite for transplantation. Cold Ischemia concludes when the recipient surgeon has anastamosed the kidney artery and vein to the recipient's iliac artery and vein respectively, with the restoration of blood flow perfusion to the organ.

Renee and the transplant surgical team as evaluated evidence based data on the living donor cross clamp time and recipient re-perfusion times. The data, collected by the Quality Assurance team, from the transplant service, verified "cold ischemia" times that exceeded one hour between January to November 2009.

Today, both patients arrive in the pre-operative unit together. The surgical teams, pharmacist, anesthesiologists, and nursing staff conduct the Universal Protocol, identifying the correct patients, consent, surgical site, procedure, and organ verification together as a group Fig. 3. The donor kidney is cross clamped and removed for donation only after the recipient surgeon has dissected and isolated the iliac vessels assuring the patient is a good candidate for transplantation. This approach is referred to as "recipient driven". Data collected from November 2009 to present have demonstrated cold ischemic times under one hour thus supporting the "recipient driven" approach as an improvement with quality patient care.

Here is a brief explanation of the Living Donor Kidney Transplant Surgery (Meeker, Rothrock, 1999). The recipient patient is transferred to the OR suite, placed in a supine position on the gel padded surgical bed with both arms, palms up, supported on gel padded arm boards at 90 degree angles. Any arteriovenous fistula will
be palpated and documented as to
the site location and presence of a
bruit. Warming blankets are placed
over the patient’s head and shoulders
and lower extremities to assist in
keeping the patient normothermic.

The OR nurse circulator will place
a 16fr 5cc Foley catheter with a “y
connector” for bladder instillation
of Neomycin solution. Sequential
stockings are placed on the lower
extremities for circulatory support. A
safety strap is placed over the patient’s
hips from one side of the bed to the
other. The transplant OR nurse will
assess the patient for correct positioning
to avoid potential skin issues and
pressure on the arteriovenous fistula
prior to prepping for surgery.

The patient’s “marked” surgical
site, the right lower quadrant of
the abdomen, is clipper cut for hair
removal as needed. Prep solution
of Chlorohexidine is applied to
the surgical site starting from the
incision site and working to the outer
parameters of the abdomen using
aseptic technique. The recipient patient’s
surgical site will be draped with four
towels and towel clips followed by the
Transverse Laparotomy sheet using
sterile technique. When all members
of the transplant surgical team are
ready, a final “Time Out” will be called
to verify the correct patient, surgical
site, consent, and ABO verification of
both the donor and recipient patients.

A curved right lower quadrant
incision is made cutting through the
skin, subcutaneous layer, and fascia.
Bleeding is controlled with silk suture
ties and electrocautery. The surgeon
dissects the tissue to expose the
hypogastric and iliac vessels Fig 4.

The donor kidney is now removed
from the ice bath, wrapped in iced
radiopaque gauze, exposing only the
vessels, and brought to the surgical field
once the recipient iliac artery and vein
are isolated. Two angled vascular clamps
are placed on the recipient’s internal
iliac vein. The surgeon makes a “slit,”
opening the vessel and irrigates with
Heparin and 0.9% saline solution using
an irrigating bulb tip on a 30ml syringe.

The surgeon will anastamoses
the renal vein to the side of the
recipient’s iliac vein using 6-0 doubled
armed Prolene sutures. Once the
vein anastamosis is completed the
iliac artery will be clamped with two
curved vascular Bull Dog clamps.
The iliac artery is opened using a
vascular “punch” the size of a 4mm
hole. The renal artery is sutured to
the recipient’s iliac artery using the
6-0 doubled arm Prolene sutures. The
surgeon removes the vascular clamps
and checks the suture lines for leakage
and any repairs made as necessary. The
transplanted kidney is now perfusing
and the transplant nurse documents
the unclamping and reperfusion times
in the medical record. Warm saline
irrigation solutions are utilized to
warm the kidney and surrounding
tissues. The anesthesiologist administers
diuretics intravenously upon the
request of the transplant surgeon.

The surgical procedure will
continue with the anastamosis of the
ureter to the bladder. The OR nurse is

Perhaps the opportunity to
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instructed to start filling the patient's bladder with the Neomycin irrigation until instructed to stop and clamp off the Foley catheter. The bladder irrigation distends the bladder for better identification of the organ structure, as well as providing bladder washing.

Access to the bladder wall is made using a surgical knife and incising the bladder 4 cm in length. The surgeon trims the ureter in a "spatula" shape opening. The bladder-ureter anastomosis is made using 5-0 PDS absorbable sutures.

The surgeon removes the self retaining retractor, blades, sponges, and instruments upon completion of the ureter / bladder anastomosis. Copious amounts of warm 0.9% saline irrigation are used to bathe the surgical site and are then aspirated out for inspection. The final observation of the transplanted kidney and surrounding tissues is performed to assess for any signs of bleeding and/or trauma. Once the surgeon has completed the inspection the team calls out for closure. Both the scrub person and circulating R.N. will conduct a count of the instruments, sponge, needle, and sharps used during the course of the procedure. The counts start from the surgical field, to the Mayo Stand, then the O.R. nurse's "back table" Fig 5. The surgical team is informed of the counts. If the counts are correct, the closure of the surgical wound continues. If incorrect, the surgical team stops closure and conducts a sterile field and surgical suite inspection until the missing item is located. Each count conducted is followed by a Radio Frequency Identification Device (RFID) scan to detect any retained sponges as an adjunct to the surgical counts.

The circulating R.N. will call the Post Anesthesia Care Unit and provide a telephone briefing to the Post Anesthesia Care Unit or Surgical Intensive Care Unit Nurse as a verbal "hand off." Information given includes the patient’s identification, surgical procedure, status of the patient, and any significant data such as allergies, drains, lines, procedures, and blood products given. Anesthesia is reversed and the patient is awakened in the OR prior to transfer to their surgical recovery unit. The patient has now been given a new lease on life.

Meanwhile the families for the donor and recipient are kept up to date with the surgical process by Tina Kress RN, Living Donor Transplant Coordinator. She will be joined by the transplant surgeons at the end of the surgery to discuss the procedure and post operative recovery.

This brief description of a Living Donor Kidney Transplant only hints at the complexity of patient care delivered by the multi-tasking transplant nurse in the Operating Room. Perhaps this glimpse will stimulate an appreciation of the inspiring work of the transplant surgical nurse and will provide a different perspective on nursing practice conducted behind the "glazed glass" doors of the Operating Room.

References
UC San Diego Medical Center is the home of the Regional Burn Center for the Greater San Diego and Imperial Valley. We stand ready to accept and treat burn victims on a moment's notice with some of the best trauma burn surgeons and nursing staff in the country. The majority of burns treated are a result of thermal exposure to high temperatures such as fire, electrical, and scalding of the skin. Burns may be caused by exposure to chemicals that are highly alkaline or acidic. The outcome from these exposures is the type and severity of trauma to the patient's skin and dermal layers. Our skin provides us with a natural shield from exposure to the environmental elements such as heat regulation, prevention of water loss, and as a protective barrier from bacterial exposure. Adjunct therapy such as fluid volume replacement, blood products, electrolyte balance, acid / base, respiratory resuscitation, etc. as well as dressings to cover the exposed tissue are the top priorities in caring for the burn patient upon admission to UC San Diego Medical Center. Once the patient has been stabilized, he or she will begin the long reconstructive process to recovery.

The first part of the reconstructive journey begins when the operating room receives a patient from the ER or the Burn Unit. Many of the patients we see in our O.R. suffer from 3rd degree burns which may affect up to 95% of their total body surface, and are compromised further by possible smoke inhalation injuries (see picture to right). We witness their arrival, often sedated and intubated with ventilatory support measures given. Their admittance is direct to the Operating Room suite where the room temperature is kept in the 80's F., the humidity around 50% to reduce the potential threat of hypothermia. The OR surgical lights and impervious sterile gowns only add to the heat felt by the staff. The circulating RN and surgical team may wear “cooling vests” during the course of the procedure just to reduce their own risk for exhaustion.

Our patients often undergo numerous surgical procedures to debride the eschar and necrotic tissues. The placement of allograft skin, as a natural skin dressing, or various microbial dressings and wound vags are applied to cover the exposed tissues while waiting for the opportune time to perform the autologous skin graft. The OR nurses assist the surgeons with providing the necessary medications used for hemostasis, antibacterial solutions, and topical vasoconstrictors to reduce surface bleeding. Our nurses support the anesthesiologist with ordering and obtaining red blood cells and plasma, albumin and crystalloid products for replacement of fluid loss during the course of the procedure.

Trudy LeCuyer RN, is the Clinical Nurse Specialist for Burn Surgery. She has been at UC San Diego since 1985. Her other clinical interests include orienting medical students to the Operating Room and serving as the GYN Service Clinical Specialist.

Trudy LeCuyer RN,
were submerged into baths in hope that the affected skin would slough off. Conversely today, early, aggressive surgical intervention is the treatment of choice. As mentioned, patients are scheduled repeatedly for surgical excision procedures and multiple applications of allograft cadaver skin or porcine until the site is considered clean enough and prepared for autografting.

Bleeding is always a grave concern for all burn patients. Blood and fluid loss must be managed accurately in order to maintain the patient's temperature and hemodynamic stability. As noted by Trudy while little was done in the past to counteract these complications, there are several avenues of treatment available to us today. Tumescent is one option, involving the injection of fluid combined with a small dose of vasoconstrictor at either the burn site or the split thickness skin graft site. This provides a synergistic affect that reduces bleeding by physical and chemical means. In combination with, or as an alternative to this therapy, the use of topical Thrombin, a powerful coagulant, may be used. This medication is applied as a fine mist spray directly to the bleeding area, and then covered with a moistened Telfa dressing. The Telfa dressing prevents disruption of the clot that is intended to form, in order to control the bleeding. For larger areas requiring debridement, lap pads soaked in a saline/vasoconstrictor solution work to slow down the bleeding in preparation for the Telfa Treatment.

Anesthesia plays a critical role in assessing the patient blood volume replacement needs. The best practice is now considered to be to replace lost volume with actual blood constituents in lieu of the formerly common crystalloid, Albumin and Hetastarch treatments. Tumescence, combined with replacement therapy poses the risk of placing a patient into fluid overload leading to possible renal complications, hence the required monitoring of the patient's electrolytes, acid base balance, oxygen saturation levels and core temperatures. In spite of the fact that the O.R. temperature is raised to 80 degrees, the patients are always at great risk for hypothermia. To diminish this complication we supplement body warmth, utilizing measures such as Baer huggers, a warm air blanket, and the traditional fluid warming blankets, in addition to keeping the patient covered and limiting exposure whenever possible.

Dressing care has become an art form. There are multiple choices available to surgeons depending on the severity of the burn and their personal preferences. The majority of them contain antibiotic properties. Some of the relatively common treatments include Sulfamylon soaked dressings, Xeroform with Polysporin Ointment, and Acticoat.

Treating these patients is not only physically, but emotionally challenging. We will be seeing these patients enter the OR for months, never making contact or getting to know them. Then the day arrives and the patient is no longer sedated or intubated. Their eyes are open and they track us. The beginning of our psycho-social relationship begins. Sometimes we have the opportunity to meet their family. Trudy makes a point not to ask them what happened. Her belief is that the family has already gone over the burn incident several times, explaining to loved ones, friends, and the doctors and wondering what other steps or measures should have been taken to prevent this tragic accident. Trudy tries to offer a calm reassuring environment providing the patient and family with a nurse who makes them feel comfortable and safe, knowing their loved one will be cared for. Trudy enjoys offering “distraction” games for the children that will include all members of the surgical team, and family while they are waiting to be transported into the operating room. The diversion offers a simple moment of escape. Trudy and team manage to find ways to involve the family with the care of their loved ones and comfort them in their stressful time of need.

Our operating room nurses deal with their own emotions as well as they contemplate some of the circumstances that bring our patients to us: small children who have been intentionally (as a form of punishment) or inadvertently scalded, patients with burned limbs resulting from falls into a fire ring, and innocent victims suffering at the expense of freak accidents or fires. Every scenario has a story behind it, and we care for each of our patients regardless of their circumstances. We function as teachers and resource specialists for them and their families as we encourage, listen, and offer support during this critical part of their experience.

On occasion a patient, discharge to rehabilitation and home, returns to visit Trudy and the nursing staff. Trudy vividly remembers the little two-year old, burned from her feet to waist, stopping by one day. Trudy was fearful the child would never be able to walk after her burn injury. Much to her delight she saw the little girl go from a “cocoon” to a bright butterfly of a little girl, dancing and running around the hallways. She demonstrated no fear as she offered hugs and kisses to Trudy and her OR nursing staff. A surge of happiness and faith in humanity spurs the team with the emotional support to carry on, to realize they do make a difference in life. And offer the promise of hope for the future.

As the clinical expert in the OR, Trudy pulls from her vast wealth of experience to mentor others in the latest and best practice in burn care, as well as the preferred techniques of our physicians. She has attended specialty seminars and shares that information with the staff. She works as well as the preferred techniques of our physicians. She has attended specialty seminars and shares that information with the staff. She works with her OR nursing staff. A surge of happiness and faith in humanity spurs the team with the emotional support to carry on, to realize they do make a difference in life. And offer the promise of hope for the future.

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The University of California, San Diego (UCSD) Shiley Eye Surgery Center opened in April 1992. It is one of the newest University Ophthalmology Departments in the country yet it has already received recognition as recipient of the 2008 award for “exemplary Overall Performance Efforts” at the Age-Related Eye Disease Conference (Shiley, 2008).

The Shiley Eye Center is a very busy center, with an average of about 250-300 eye surgeries each month. The Shiley Eye Center has a diverse patient population ranging from infants to the elderly. Despite this diversity, the majority of the patient services at the Center are provided to older adults with decreased vision due to cataracts. Cataracts surgeries performed at Shiley Eye Center comprise approximately half (an average of 130) of all surgeries each month. This large elderly patient population and large number of cataract surgeries, led to Shiley Eye Center’s significant contributions in the areas of diagnosis, prevention and treatment of eye disease (Linebarger, Hardten & Lindstrom, 2000; Medeiros, Alencar, Zangwill, Sample & Weinreb, 2009; Vizzeri & Weinreb, 2010; Weinreb, 2007; Weinreb & Khaw, 2004; Zangwill et al., 2004). These contributions also include a nursing quality improvement initiative for patients with cataracts, the focus of this article.

Cataracts are one of the most common causes of blindness (Alhassan, Kyari, & Ejere, 2008). A cataract is a clouding of the eye’s natural lens, which lies behind the iris and pupil (Dorland’s 30th ed., 2003; WHO, 2010). The natural lens works much like a camera lens, focusing light on the retina at the back of the eye. The lens adjusts the eye’s focus, letting us see things clearly, both up close and far away. As a cataract becomes more cloudy, the person’s vision is further compromised. Cataracts are a significant global problem. According to the World Health Organization (WHO), age-related cataracts are responsible for 48% of all blindness worldwide, representing eighteen million people (WHO, 2010).

Cataract surgery is the most frequently performed surgery in the United States. Annually between four to five thousand cataract surgeries are performed for every one million persons in the United States (Kohnen, 2009). Cataract surgery is very successful in restoring vision. Nine out of ten people who have cataract surgery, regain very good vision, (Brian & Taylor, 2001).

A comprehensive study reported in the Archives of Ophthalmology noted that 95.5% of cataract surgeries resulted in 20/40 or better uncorrected vision, which is legally acceptable for driving (Powe et al., 1994). Of more than seventeen thousand (17,000) eyes evaluated, fewer than 2% had sight-threatening complications, in part because of the eye drop medication regimen following the surgical procedure (Freitas, 2007). Even though the eye drops are proven to reduce the risk of sight-threatening complications associated with surgery, compliance with these post-surgery topical treatments (eye drops) is typically low even with monitoring (Hermann, Ustundag & Diestelhorst, 2007).

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In 2010, this identified lack of patient adherence with eye drops resulted in a Shiley Eye Center nursing initiative to improve adherence and ultimately patient outcome post-surgery.

At the Shiley Eye Center, despite written patient instructions related to compliance with medication reconciliation, as mandated by the Joint Commission, the nursing staff still received multiple telephone calls from recently discharged patients. The most frequent question that is asked is: “which eye drops to use following surgery?” Dolly Ayapana, a registered nurse, working at the Shiley Eye Center, saw this as an opportunity for quality improvement initiative. Dolly reviewed and revised the patient discharge instructions based on feedback from patients. The revised instructions included the development of post-op list of eye drops with detailed pictures and instructions (see Figure 1). The eye drop list is composed of eyes drops used most frequently by surgeons at the Shiley Eye Center. This eye drop list is not only available to patients at the Shiley Eye Center, but is also available to the whole UCSD organization through the forms management website (PH225) and the UCSD nursing website.

In the past 6 months since the implementation of this initiative, the Shiley Eye Center nursing staff has reported that phone calls from post-cataract surgery patient have decreased from average of ten calls per day to one or none at all. Additionally, patients have reported a better ability to adhere to their eye drop regimen. This nursing quality project has allowed the unit to increase patient satisfaction as evidenced by our patient outcomes and our satisfaction data collected by the center. Thus, the initiative has increased patient adherence, patient satisfaction and ultimately patient outcomes.
Shiley Operating Room

By Chris Thompson RN, BSN, CNOR

The Shiley Eye Center was the first building on the East Campus. The Surgery Suite was opened in April of 1992 with 2 Operating Rooms and 4 PACU beds. The PACU beds were utilized for both preop and postop patients. In the beginning our case load was between 60 and 100 cases per month. In the fall of 2004 the Surgery Suite was expanded to include a larger waiting room, a 3rd OR and 3 additional PACU beds. Our cases per month increased from 150 to 250 per month, up to our high of 353 cases in June of 2009.

At this time the Shiley Surgery Center is expanding yet again. The expansion will include a 4th OR, 5 additional PACU beds, expanded locker rooms, staff lounge, storage, room for 4 surgery schedulers, more waiting room space and a consultation room. Completion is expected by the end of the year.
Shiley Surgery Center’s Pediatric Surgical Cap Project

By Kirsten Thomas RN, CNOR

At Shiley Surgery Center, we are privileged to be able to care for a wide variety of pediatric surgical patients. We perform many types of surgeries on our pediatric population including corneal transplant, cataract surgery, and strabismus surgery. Many of these infants and children require multiple surgeries and become part of our Surgery Center “family.” Our staff enjoys being able to work and interact with the babies, toddlers, and older children that come to our facility.

Working with young patients comes with its own set of challenges. Our staff is trained on age specific competencies and new employees are oriented to the specifics of working with the pediatric surgical population. One of the challenges we encounter with our young patients is preoperative surgical anxiety. We are continuously looking for ways to reduce this anxiety, often in a creative manner. Sometimes we sing “Twinkle, Twinkle, Little Star” to children as they are drifting under anesthesia. We also try letting the patients pick a sweet smelling lip balm that is placed on the inside of their anesthetic mask. We allow them to bring a “comfort” item into surgery which is usually a stuffed animal or blanket. All of these are simple things to do, but they have a dramatic effect in providing a distraction and easing our little patient’s anxiety.

I read an article in a nursing magazine about a program that a pediatric surgical nurse started at her hospital to help decrease their patients’ preoperative anxiety. She called it “Sew Angelic” and started making homemade surgical caps for her patients that they could wear in surgery and then take home with them. This sounded like such a great project that I decided to write the nurse who started the program in order to get more information. She sent me the template they used for the small surgical caps. I felt that this was a creative way that could benefit our little patients and give them something to smile about before surgery. After contacting UCSD’s Volunteer Services and explaining what I wanted to achieve, they enthusiastically embraced the task of making pediatric surgical caps for us. The Shiley staff and our volunteers together supply the material for this project.

Now, when the children come in on the day of their surgery, we have a big bin filled with all types of surgical caps in many fun patterns. They are able to choose which one they want, put it on themselves, wear it to surgery, and then take it home with them. We also take a picture of them wearing the cap, and give it to the parents as a keepsake. I developed an evaluation tool that we used to determine our pediatric patients’ anxiety preoperatively and whether or not the anxiety was mitigated through our surgical cap project. The data was collected over several months, with the results supporting the project’s use as a distraction and means of reducing preoperative anxiety in children. This has been such a fun project. It is very fulfilling to see our young patients stop crying and start smiling when they are able to choose their own homemade surgical cap, put it on, and then “ham it up” for the camera.

At Shiley Surgery Center, we are always striving for ways to improve our patients’ perioperative experience. Thanks to our staff, and our wonderful volunteers who have helped to make this surgical cap project successful, we have made another step towards our goal.

Kirsten Thomas RN, CNOR graduated from Grossmont College nursing program in 1986. In 1988 she attended UCSD’s Postgraduate Perioperative Nurse Program. Upon completion of the program Kirsten was hired at UCSD in the Main Operating Room, where she remained until 2001 when she transferred to Shiley Surgery Center.
Picture yourself waking up after surgery… Nauseated, blurry eyed, in pain, and unsure where you are. And then you see a figure in blue scrubs. She holds your hand, reminds you where you are, holds an emesis basin close by and makes the nausea and pain dissipate. She calls your family to come sit with you and tucks you in with a warm blanket. You feel reassured and comforted.

This is one of the countless roles of the PACU nurse. She keeps a watchful eye on both of her patients as they emerge from anesthesia, ensuring that their physiological and emotional needs are met. From the most essential airway management to blood pressure interventions, monitoring drains to easing anxiety, the PACU nurse needs to be knowledgeable, skillful, and versatile.

“It’s the best job in nursing!”
You might say that about your job, but what other nursing job lets you care for such a diverse population of patients? The PACUs at UCSD keep nurses stimulated with a variety of patients, from carpal tunnel surgeries to craniotomies, pediatrics to geriatrics, and everything in between.

It’s an environment that is continuously evolving with endless learning opportunities. We care for patients who have undergone new procedures, such as alcohol sclerotherapy to treat a facial AV malformation done with MRI guidance for the first time at UCSD. For this patient, the new treatment could mean a better cosmetic result and a more normal life.

It is the patients who make all our efforts worthwhile. We are lucky to have had some amazing patients in the PACU who have given the staff perspective and insight. I will always remember a patient that I cared for several times who lost her foot in a traumatic accident. She joked that, “My husband said I had big feet anyway!” She continued on a serious note, “I could have lost everything, I’m thankful that it was just my foot.”

In addition to exposure to new technology and our wonderful patients, the PACU is a great place to work because of our resources. Anesthesia personnel such as attending physicians, residents, and CRNAs (Certified Nurse Anesthetists) are always available and accessible to help when we need them. This close relationship benefits our patients greatly because their needs can be met quickly. Furthermore, it’s reassuring to know that if you need help there is always someone close by who is happy to assist.

Does continuity of care exist in the PACU?
While we meet many of our patients just once, we also care for patients who require multiple surgeries. Week after week we assist these patients to wake up comfortably from their anesthesia, paying close attention to what medications were most effective during their last recovery, and striving to make each PACU stay better than the last.

When possible, our nurses request to care for patients that they are familiar with. It gives the patient comfort to see a familiar face and gives the nurse familiarity with the patient’s needs. We try hard to provide this service for the majority of Dr. Harrell’s pulmonology patients who often return every three months for treatment. Every Wednesday
morning when Dr. Harrell does his bronchoscopy procedures our staff works together to arrange for each patient to be recovered by a nurse who knows them. This familiarity is important not only to the patient, but to the families as well. When the parents of a pediatric burn patient know that they will have the same nurse wake up their child after surgery they are comforted and reassured while they anxiously wait to see their child after surgery.

**Frustration!!**

Patient flow can be a challenge in the PACU. At times there can be a lack of beds and/or nurses to care for the constant inflow of patients. It’s a trying job to be in charge, turning down patients from the OR, Interventional Radiology, Electrophysiology, and other outlying areas until there is enough room for the next patient.

The wait for an inpatient bed is frequently the culprit for delays. Though we work with the Nursing Supervisor to find beds for our patients, sometimes our only option is to hold them in our PACU until beds become available. These longer waits have been a source of patient dissatisfaction, so the PACU nurses pooled resources to donate two DVD players, headphones, and a DVD library for our patients to use while they wait. Our post-implementation surveys have shown that both patients and staff have found the distraction to be an effective way of passing the time.

In addition to helping our patients pass the time, we are actively working to decrease the time they have to wait for their floor or unit bed. We track bed waits monthly, assess the reason for the wait, and work with our management team in an effort to decrease our wait times.

**A Tight-Knit Group**

Have you ever had to work a full shift, go home for a few hours then return for another full shift? When the OR is busy all night, so are the On-Call PACU nurses, which means that our staff members spend a lot of time together! As a result, we have developed into a close group that helps and relies on each other.

While we practice total patient care during Phase I recovery of our patients, each nurse looks out for every patient in the PACU, lending a hand whenever it’s needed. We know that patients can see this unique relationship and recognize our team work from the results of our post-op surveys. Two of our PACU nurses randomly contact patients at home after their surgeries to ask them to rate their experience. We consistently receive high marks for the high quality care and attention we give to all of our patients.

**Our New Space**

Described by our Nurse Manager, Esther Lee, as “the Rolls-Royce of PACUs,” the newly renovated Main PACU and Pre-Op areas opened in September of last year. Since then both staff and patients have enjoyed a bright and spacious recovery environment. With twelve standard bed spaces, two isolation rooms, and five “swing” beds, we are equipped to care for our patients in an attractive area with brand new equipment.

We invite all nurses to come take a look at our beautiful space and to learn about what we are doing every day to improve nursing at UC San Diego! It really is the best job in the nursing!
Making Sense of Anesthesia

By Dahlia D. Tayag, RN, BSN, CCRN and Angela White RN, BSN, CPAN

From local to general, there are many types of anesthesia. Knowing what to expect when you admit your patient from the PACU may not always be clear. Will a patient who has had a “MAC” need special monitoring? How will the local anesthesia affect my patient who had a bronchoscopy? Knowing these answers is important to the PACU nurse and to the nurse receiving a patient from the PACU. Let’s explore some examples.

An eighty year-old patient is returning to her med/surg floor following a cataract extraction. The PACU nurse reports that she is alert and oriented, vital signs are stable, and that her right eye patch is clean, dry, and intact. She has received a “MAC” anesthesia and has been in the PACU for thirty minutes with no complications. You hang up the phone and then realize... ‘I’m not sure what a “MAC” is!’

**TIP:** Monitored Anesthesia Care (or MAC) is a type of sedation where an anesthesia provider is present at all times to provide the patient with anxiety and pain relief, amnesia, comfort, and safety during the procedure. The patient’s reflexes remain intact and they wake up quickly. Often this is accomplished with a propofol drip. Recovery time must be at least thirty minutes.
With this information in mind, in addition to the report that the patient is alert and oriented, and has been recovered in the PACU for at least thirty minutes, you feel confident that the patient is ready for transfer back to her med/surg bed.
With knowledge of these details, you accept the patient and monitor him closely when you give him some apple juice an hour later.

These patients are just a few examples of PACU nursing. We welcome any questions that you may have regarding anesthesia and nursing policies and procedures in the PACU.

References


act blindness: Challenge for the

You are receiving report from the PACU nurse regarding a patient that will be admitted to the Progressive Care Unit for overnight observation. The patient has had a rigid and flexible bronchoscopy with balloon dilatation to treat his tracheal stenosis. He has had a general anesthesia with local anesthesia topically applied to the surgical site. The patient has been recovered for over an hour in the PACU after his general anesthesia, is stable, and comfortable. He is asking for some water but the PACU nurse says he can’t have any for at least another hour.

TIP: General Anesthesia is given intravenously or by inhalation. It affects the brain as well as the entire body. The patient is completely unaware and does not feel pain during surgery. It often causes amnesia during the immediate postoperative period. Patients who have had general anesthesia must be recovered in the PACU for at least one hour. Local anesthesia is used during bronchoscopies to reduce post-op discomfort. Patients who receive local anesthesia during their bronchoscopy procedure should not have anything to eat or drink for at least two hours because the local anesthesia can cause loss of protective reflexes in the throat and potentially lead to aspiration.

You are picking up your uncle in the Same Day Surgery PACU after a carpal tunnel procedure. When you arrive at his bedside he is alert and oriented with his arm elevated and is denying pain. The PACU nurse tells you that he came out of the operating room awake and comfortable after local anesthesia and conscious sedation. She says that he is ready to be discharged home. You ask the nurse, “Are you sure he’s ready to go? He just arrived in the PACU!”

TIP: Anesthesia for carpal tunnel surgeries is often done with a Bier Block local anesthesia. This involves an injection of a local anesthetic agent directly into the surgical area to block pain sensation. It is used for minor procedures on a limited part of the body. Conscious sedation often accompanies this type of anesthesia to ease patient anxiety and ensure comfort. Since your uncle is awake, oriented, comfortable, and meets discharge criteria, the PACU nurse deems him ready for discharge. She reviews the discharge instructions with you and your uncle verbally and in writing, allowing for questions to be answered. To prevent injury to the anesthetized limb, she puts your uncle’s arm in a sling and directs him to keep it on until full sensation resumes to his hand.

With knowledge of these details, you accept the patient and monitor him closely when you give him some apple juice an hour later.

These patients are just a few examples of PACU nursing. We welcome any questions that you may have regarding anesthesia and nursing policies and procedures in the PACU.
Introducing Family-Centered Care to a Traditionally Closed-Unit PACU

By Nancy Li RN, BSN, CPAN

PACU-A Historically Closed Unit

Visitation in the PACU (Post Anesthesia Care Unit) has been a controversial issue in past decades. Until now, many PACU’s in United States hospitals have remained closed to visitors. Short duration of stay, need for close observation without interference, lack of privacy, lack of space, perceptions of limited patient memory of PACU stays, and the PACU environment being disturbing to visitors are commonly cited rationales for restrictive visitation policies.

At UCSD our PACU has a mixture of patient populations including Phase I (immediate post-op recovery period), Phase II (getting ready to go home), ICU/floor overflow, and pediatric patients. All of these patients are in one physical PACU space.

In the traditional practice, parental visitation for children is allowed for one parent only in our PACU. Additionally, one visitor is allowed entry to receive discharge instructions for the patient who is ready to go home (Phase II), and one visitor for an ICU overflow patient. However families of adult patients in the immediate post-operative period (the majority of patients in the PACU) continue to follow a no visitor policy.

This inconsistent visiting practice has created anxiety and frustration for patients and their families.

Scenarios
1. 12 o’clock noon, a female patient is waking up from anesthesia following a D & C procedure. Her first words are, “Can I see my husband?”

   The nurse replies, “Sorry, you are in the recovery room. No visitors are allowed here.”

   The patient responds, “Why? I want to see my husband now!”

   The nurse tries to console her and asks, “Are you in pain? How can I help make you comfortable?”

   The nurse is trying her best.

   The patient continues to cry loudly and says, “No, I told you I want to see my husband!”

   In this scenario the patient is stressed to be separated from her husband, but due to the traditional visitation policy she is denied access to him during the phase I period of her recovery.

2. It is a hectic day in the PACU. The phone rings and the charge nurse runs to answer it. It is one of the family members in the waiting room requesting to see her loved one. The charge nurse informs her that her family member is in the PACU and there is no visitors allowed.

   The family member argues, “The doctor talked to me a while ago and told me I can come and see my husband. And I know someone waiting here earlier has been called into the recovery room to see her son. Did something bad happen to my husband? Is he not doing well? I have been waiting for hours. Why can’t I see my husband now?”

   This scenario demonstrates the perception that family may have that staff is inconsistent with visitation rules in the PACU. This can easily be misinterpreted as an ominous sign.

The Evidence Based Practice Project

Based on escalated frustration levels in the surgical waiting room and the trend towards family centered care in our health care system, the restricted visiting practice in the PACU needed to be re-evaluated.

Does open visitation in the PACU result in decreasing patient/family frustration and anxiety, and increase their satisfaction? With this question in mind, an Evidence Based Practice Project was initiated in March 2009.

The first step of this project was to acquire evidence. Through an extensive review of the literature on family visitation in the PACU, overwhelming evidence was found supporting family centered care in the PACU. Many published studies support that visitation in the PACU not only decrease patients’ anxiety but is beneficial and important to the family as well.

In July 2009 after IRB approval, the pre-survey tool for patients, families, and nursing staff was developed which collected the opinions of open visitation. An education tool for visitors in the form of an informational brochure was developed and distributed in the waiting room to families. Education sessions were given to nursing staff in the PACU during staff meetings, which included the tenets of family-centered care, change in visitation guidelines with supporting evidence, and
communication strategies for working with families. Information sessions were also given to the staff from Pre-Operative Admission unit, Pre-operative Care Center, and Operating Room. Visitation policy changes were also communicated with the Anesthesiology and Surgery Departments.

Starting in September of 2009, a pilot study of the new visitation policy was implemented.

The new Guidelines include:

- Approximately 30 minutes after
- the patient’s arrival to the PACU, the nurse is to call the designated contact person or loved one to update them on the patient’s condition and invite them to visit the patient.
- When the visitor arrives, the nurse is to introduce the family to the PACU environment and equipment. The visitor is allowed to and encouraged to stay at the bedside and participate in the care. Three months after the implementation of the new visitation practice a post-survey of patients, family members, and nursing staff was conducted and data was collected in January of 2010.

The Change of Practice

Based on the result of this project and the support of our departmental management team, family-centered care has been adopted throughout the entire UC San Diego Health System in all of the PACUs. Our PACU is no longer a closed unit. We now welcome you to participate in the care of your loved one!

**Outcome of the Project**

Data collection showed that family members and patients responded favorably to family centered care in the PACU. The majority of both groups strongly agreed that visiting the patient in the PACU was important and beneficial.

**Patient Opinion Pre vs Post Survey:**

"Do you think allowing family to see you in the recovery room will be beneficial?"

**Patient Survey Results:**

67% strongly agreed that family presence benefited their recovery compared to 28% from the pre-implementation survey. 65% of patients preferred “family help taking care of me” compared to 26% from the pre-implementation survey.

**Family Member Opinion Pre vs Post Survey:** "Do you think allowing visitors in the recovery room is important and beneficial to you and the patient?"

**Family Survey Results:**

90% of families surveyed after the implementation strongly agreed that allowing visitors in the PACU is important and beneficial compared to 47% from pre-implementation survey. In response to family presence to “provide support to the patient”, the post-implementation survey showed a rate of 4.87 on 1-5 scale compared to a rate of 4.11 found in the pre-implementation survey. In regards to “being able to help with simple care” families rated 4.3 in the post-implementation survey compared to 3.66 in the pre-implementation survey.

**Nurse Survey Results:**

Concerns about PACU space and privacy significantly decreased in the post-implementation survey compared to the pre-implementation survey, while agreement that open visitation is beneficial increased significantly.

With regards to when they would prefer to come in and visit, the majority responded, “as soon as possible”. Furthermore, families preferred, “to participate in simple care”.

Patients described that the most important benefits of family visitation were, “It’s very comforting to see a familiar face”, and “to know that my family is here is part of my strong will to get better”. Additionally patients said that, “Family presence gave me moral support and helped me to understand the (surgery) information”, and “My family at the bedside made me feel more at ease”.

Family members responded most favorably to the open visitation practice. One comment on the survey was, “This has made all the difference to me. I always want to be there as soon as I can and for as long as possible. It is horribly stressful to wait.”
A home away from home:
This is exactly what UCSD offers at the Bannister House.

Since its opening on May 11, 1994, over 3,200 families from 50 states and 23 countries have enjoyed the comforts at this wonderful facility located just steps away from our hospitals.

The mission of Bannister Family House is to provide affordable lodging and supportive services for out-of-town families of patients who have come to UCSD Medical Center in Hillcrest and Thornton Hospital in La Jolla due to serious injury or illness.

There is a large home just steps away from Hillcrest Hospital. The Bannister Family House has also partnered with ARCH and Moores Cancer Center to provide two two-bedroom apartment Hospitality Suites located in La Jolla. These two facilities are a haven of comfort and hope for weary families who share similar experiences and concerns in friendly, homelike surroundings close to the hospital.

All of the comforts of home are provided at the Bannister Family House...a place to sleep and rest during the day, a kitchen for preparing home-cooked meals, laundry facilities, and a place where children can lead relatively normal daily lives. By keeping family units together, we hope that they may find the inner strength and spirit to move forward from a period of overwhelming stress. (health.ucsd.edu/bannister).

The Bannister Family House depends largely on donations to ensure that it remains a haven of comfort for families facing severe medical crises. For this reason we wanted to contribute to this very exemplary cause.

On a recent morning, the staff of the Hillcrest Main O.R. took part in an outreach event for this worthy facility. Our staff wheeled an oversized, three-tiered, cart loaded with items donated by all of our staff for the families staying the Bannister House. There was food-a-plenty; all the makings of a breakfast made for royalty: eggs, bagels, fresh coffee, muffins, fruit, etc. A large basket of Starbucks goodies was left on the kitchen counter for all the families to share. There were also individual family bags, one for each of the families there, containing lotions, soaps, toothbrushes and paste, shampoos and other personal goods.

We hope that in a small way we have helped make their time at Bannister House just a little more comfortable and brighter!
One of my favorite activities, when I visit my hometown of Philadelphia, is to share what I do as an Operating Room Nurse. Each year my sister, an inner city elementary school teacher, invites me to talk to her third grade class ~ a sort of “Career Day.” Many of the children have family and friends who may have had operations. This was a chance to have the kids see the role of a nurse as much more than just giving them “shots.”

This year’s topic was “The Surgical Team.” I began by first talking about the team concept - an idea they could easily relate to through sports. Each member, or team player, has a different role to play, or job to do, yet all are united in a common purpose. The Surgical Team, made up of the Anesthesiologist, the Surgeon, the Instrument Nurse, and the Circulating Nurse, come together for one important objective: to provide the patient with a safe, positive surgical experience.

Next came putting it all together. This is the fun part for the kids playing ‘dress-up’! Suited up in O.R. garb and each one knowing their special part to play, the young volunteers got ready. I enjoyed watching their enthusiasm build. Their excitement filled the classroom as their eager eyes gathered to watch the operation begin.

Our young anesthetist put the patient to “sleep”. The circulating nurse did the necessary preparation while the scrub nurse readied the instruments. The Team took a “Time Out” to verify the right patient, the right surgery, and the right site. The operation began with the surgeon making the incision. The Bovie or “fire pencil” was used to coagulate bleeding vessels, tissues were clamped and tied, and the diseased organ was removed or repaired. The wound was irrigated and sutured closed. The operation went smoothly! Our pretend patient this year was Shrek. He was safely transported to the Recovery Area (PACU). Thanks to the skills and teamwork of all the members, this experience was a big success. It was wonderful to see their young faces beam with satisfaction of a job well done!

This opportunity was so rewarding for me. It allowed me to watch young minds expand as the value of teamwork became real through learning, fun and play!
War is ugly and it brings out the worst in people, however, it does bring out the best in people too. I have been working in the operating room since 1999 and I am also a Captain in the U.S. Army Reserve. I returned home last August after spending eleven months serving with the 349th Combat Support Hospital (CSH) in Afghanistan. Serving as the Officer-In-Charge (OIC) of the operating room, my assignment had its share of challenges. Though all of us were medical personnel, my colleagues and I were soldiers first, which meant going through three months of pre-deployment combat training. Our reserve unit had to engage and qualify in Army combatives (hand-to-hand fighting), weapons handling and marksmanship (photo 1), close quarter combat (building assault and room clearing), convoy trips through simulated improvised explosive device (IED) laden roads, mounted and dismounted patrols, day and night navigation utilizing compass and global positioning system (GPS), and other assorted military skills. Following Army Warrior training, the 349th CSH had to successfully demonstrate its medical, organizational, and command/control skills in a final training exercise before getting the nod to deploy. I did a lot of this type of training as a Navy Hospital Corpsman with the Marines in my younger days but doing it all over again as a 42-year-old was physically taxing.

Austere Conditions

Our unit arrived in Afghanistan in late September, 2008. We replaced the outgoing CSH at Forward Operating Base (FOB) Salerno in Khowst Province. Salerno Hospital is the busiest surgical unit in the Regional Command East (RC-East) area of operations. I was optimistic when I toured the one-room, two-table operating suite for the first time. We had the same surgical tables, anesthesia machines, electro-cautery units, pneumatic tourniquets, a mini-fluoroscopy unit, plus oxygen and suction hook-ups that we were used to using at home. These items were all we had as far as 'luxuries' went. Infection control and maintaining sterility during surgical cases were our biggest concerns. The operating room was obviously not built to code like a normal O.R. in the U.S. but we had to adapt and make do with what was there. There were enormous gaps in the doors, no positive pressure nor air exchange available, swirling dust and dirt everywhere, and an abundance of flies in all areas of the hospital. During multiple traumas, my crew and I ran two tables simultaneously, something that is not typical back home where each surgical procedure is done in a separate room (photo 2). Remarkably, despite
all these difficulties, the CSH was able to maintain a low post-operative infection rate.

UCSD Medical Center’s Influence
I credit both the support of my colleagues and my years of experience in Hillcrest’s O.R. for my successful performance as a military perioperative nurse in Afghanistan. I was able to contribute my surgical nursing knowledge of trauma and burns to my fellow nurses, surgical technicians, and surprisingly, to the surgeons themselves. Trauma combined with burn surgery is rare for active duty nurses and surgical technicians who have never deployed to a combat zone. Even burn surgery alone is uncommon for active duty surgeons who do not work in burn centers. Upon request from our surgeons at Salerno Hospital, I provided information on techniques and methods utilized by Dr. Bruce Potenza during his burn surgeries at Hillcrest.

Into the Line of Fire
To this day I treasure having been a witness to, as well as a part of, some of the most amazing feats of lifesaving performed by the line medics, flight medics, surgeons, anesthesia providers, nurses, and medics of the 349th CSH. Injuries caused by conventional military ordnance and by unconventional methods (IEDs) are some of the most horrible that I have ever seen. However, with extraordinary skill and determination, our team was able to adapt to the austere environment, overcome the challenges of limited equipment and supplies, and save the majority of our patients who suffered such horrific combat injuries.

One day which exemplifies this heroism occurred on the morning of May 13, 2009, when a Taliban insurgent drove his bomb-laden vehicle up to FOB Salerno and destroyed the front gate (photo 3). The enormous blast was so powerful that it nearly threw me out of my bunk as I slept. Soon after the explosion, the loudspeakers blared that casualties were on the way in, so I quickly dressed and ran to the hospital. When I arrived, the whole scene was surreal. There were civilian Afghani patients strewn all over the hallways, drenched in blood. It was a shocking scene of controlled chaos. Medical personnel were scrambling around trying to get organized in order to properly triage and treat the victims. The emergency room was packed with casualties and treatment teams. I peered out into the ambulance driveway and saw that it was also crowded with blast victims and medical personnel. This was a mass casualty event that medical organizations constantly train for, but hope never to experience. The CSH received 29 gravely injured victims within minutes after the blast and unfortunately, seven of them died during treatment. Special Forces operators at the scene estimated that at least 20-30 victims were practically vaporized at the point of impact. By sheer luck none of the casualties were U.S. personnel. Just as if I was participating in an O.R. resuscitation procedure at home, I located my trauma surgeon, received a situation report, and quickly organized my O.R. crew. We established a game plan for triage and treatment of all the casualties requiring immediate surgery. The CSH worked tirelessly throughout the day and into the long hours of the night. No one stopped to rest until all casualties were treated and cared for.

The message I took away from this experience is that although many people may not agree with the war, that day demonstrated to everyone present that Americans can indeed be a kind and caring people, who can look beyond their own needs and do whatever they can to help others, even in a situation when their own lives and safety may be at risk.
I was originally drawn to the Nursing profession because I wanted the opportunity to help disadvantaged people. I knew that, as a nurse, I would be able to work with those truly in need. As I saw it, nursing is fundamentally about caring and because of that fact nurses can make a difference in the world every day. Nursing offers limitless possibilities, as well – there are many different avenues available to realize your dream.

Despite having a busy family and career life, I am able to volunteer my time as a nurse for a cause about which I feel passionate. The experience has strengthened me and has brought fulfillment to my life, as well as allowed me to provide a great example for my children. It is important to be paid for what we do, but volunteering can be a wonderful enriching experience. Doing volunteer work has allowed me to meet new people, learn new skills, and to be a part of something truly life-changing for others.

Locally, I volunteer for Fresh Start Surgical Gifts as a perioperative nurse. We do plastic reconstructive surgeries on disadvantaged children and young adults with deformities caused by trauma, accidents, abuse or congenital defects. I have been volunteering with Fresh Start since 2004.

Part of the program involves going with Dr Amanda Gosman, a Plastic Surgeon at UCSD, to the Hospital de Infantil de las Californias in Tijuana, Mexico where we perform surgeries on children with cleft lip, palates and craniofacial deformities.

It was on one of these trips that Dr. Gosman asked me if I would like to go to India with her in February 2010. She needed an OR Nurse to assist her with plastic reconstructive surgeries, mainly for cleft lips and cleft palates in children. I was excited at being offered the opportunity to travel to India, especially since I had not visited that part of the world. Dr. Gosman did not provide a great deal of information about the trip, so I did not know what to expect. However as soon as my vacation request was approved, I started on the rather

**Humanitarian Medical Mission Experiences in India**

By Vina Limson, BSN, RN, CNOR

**Arrival in New Delhi, we were met by the Indian Christian Mission team.**

**The San Diego Team - Vina, Evelyn, Dr Champaneri, Dr Gosman and Julie**

**Vina Limson, BSN, RN, CNOR is the Assistant Nurse Manager of the Thornton Operating Room. Vina graduated from the Far-Eastern/University Nursing School in the Philippines. She has been at UC San Diego since 1999.**

**10 year old boy with contracture release and graft from abdomen. This is an improvised bed with upright position. We placed step stool under the mattress and secured with rope.**
involved paperwork needed for trip to India.

Dr. Gosman’s group was sponsored by the LEAP Foundation (Life Enhancement Association for People), a Christian Foundation based in Dallas, Texas. There were 25 team members, including Plastic Surgeons, Pediatric Anesthesiologists, OR Nurses and Surgical Technologists, Anesthesia Technicians, Post Anesthesia Care Unit Nurses, an Orthodontist, and other support staff such as Videographers, Photographers, and Telecom Technicians. Members of the team came from all over the United States. Six of us came from San Diego: Dr Gosman, Evelyn Snyder RN, Julie Brueninger, RN (Rady Children’s Hospital), Dr Champaneri (Anesthesia), Beth Stevens (Telecom Tech Support) and I.

The trip commenced with a 16hr flight from Chicago to New Delhi, after which we took another 13 hour ride on a sleeper train to Damoh, a very remote place in Central India. We stayed at an orphanage called Central India Christian Mission (CICM). The accommodations were minimal, but the staff at the orphanage took very good care of us. They served us three meals a day and provided laundry service, too.

We had two Operating Rooms at the hospital, a small one for Dr Gosman and a larger OR which was shared by the other 2 surgeons. We performed 78 plastic surgery cases in 4 days. Regretfully there were hundreds of children turned away due to medical conditions that made them poor surgical candidates. The surgeries were performed with bare minimum supplies and equipment. Because our supplies and instruments were so limited, we learned to be creative and resourceful with what we had available. As our supplies got low, we used Cidex to sterilize the remaining items needed for the surgeries!

The days were long. We worked continuously for 8-12 hours at a time, often with no breaks. We ate lunch between cases. With all that, it was an unforgettable experience and one that we would not have missed. We had two goals for the trip. Besides helping the needy in this part of the world, we took the opportunity to teach, sharing our surgical experience from the US with our colleagues in India. When nursing students came to observe the surgeries we reinforced the importance of aseptic technique, including scrubbing, gowning and gloving.

Though the work was challenging, it was not all work without play. We were given some time to experience just being in India. We found the Indian people to be very hospitable and enjoyed our interactions, though language was a bit of a challenge since few spoke much English and we spoke little Hindi. For an outing we divided into two groups. One group went to see the Taj Mahal, one of the eight wonders of the world. The other group traveled back to New Delhi for some shopping in a country very different from our own.

For all of us it was truly a fulfilling trip. We were able to offer our specialized help to patients in need and also to experience a small part of the culture of India.

I am thankful to Dr. Gosman for giving me this opportunity. It was a enriching experience and one that led to soul searching on my part. I was affected emotionally when I met patients and families who traveled from all parts of India by bus or by foot for the opportunity to provide a healing surgery for their loved one. I learned much from them and from the experience in their country, but perhaps the most important thing I learned was to appreciate what I have and to try to take things more slowly. The people we helped in India were very poor, with few possessions, and yet they continued to smile at us the whole time we were there. Their ability to appreciate small things in their lives was very illuminating.

This trip gave me a glimpse of the kind of service-oriented nursing opportunities I have always wanted. Clearly there are so many people doing wonderful things in this world and that realization has inspired me to be a part of something bigger than myself. I still want to make a difference!
The Outpatient Surgery Center has begun a monthly Journal Club with the goal of integrating research into our delivery of nursing care. We believe that our Journal Club provides an excellent and unique opportunity to develop staff professionalism, skills and clinical excellence.

First, we wanted to determine if there was an interest by our staff to refresh our knowledge base in this way. We found an overwhelming interest and felt that Evidence-Based Practice improves the quality of patient care. Our OSC Journal Club was created to inspire and empower our nurses and staff to participate in improved patient outcomes through collaboration with one another on practice issues and topics. We chose clinical topics to begin our Journal Club and this seems to be the key to our success. Present at our first meeting were: Jean Constantino RN, BSN, Nurse Manager of OSC, Rudy Leonardo RN, BSN, Elvie Porcadas RN, BSN and Pat Madamba RN, BSN, CNOR. We covered topics on continuously monitoring an open unused sterile field, skin status documentation after tourniquet use and blanket warmer settings. Eye protection comparing different protective eyewear, was the subject of our second meeting. This article reinforced our practice that all perioperative personnel wear protective eyewear, including circulating nurses. We began with discussing articles from our professional journal, AORN. Because we all subscribe to it, the articles were easily accessible. We do not limit our discussions to this one source. We integrate other evidence-based articles.

Clearly we grow professionally through integration of evidence-based decision making, shared governance and clinical experience to optimize patients care and develop our clinical practice. The initiation and implementation of our club has been a rewarding staff development initiative, allowing institutional promotion of professionalism and effective change in the Outpatient Surgery Center. The meetings are very informative and pertinent to our work place. All staff are encouraged to be involved which makes discussions interesting as they involve all of us. Our ongoing vision is to empower and promote the growth and development of our professional practice through participation in our new OSC Journal Club.
On Saturday, April 19, the Operating Room sponsored a “Take Your Child to Work Day”. It was an eventful day full of ‘hands on’ experience for children of all ages. All the staff members who participated donated their time and talent. Dressed in real scrubs, the children had an opportunity to see and learn things they had never been exposed to before.

They were able to conduct laparoscopic surgery, but removed bracelets and treats instead of organs.

The hand washing station hit home demonstrating that while your hands look clean, when exposed to the black light (enhanced with a little glow powder used as a substitute for germs), germs are visible everywhere! The message to wash your hands often was heard loud and clear.

They viewed real specimens from pathology and a kidney on pump. Anatomy lessons were learned as children tried to place fabric organs in the correct location back onto the vest that one of the Lifesharing employees was wearing.

Intubation was explained, while children watched their own heart tracing on a monitor. They were able to explore orthopedic instrumentation, view broken bones, and have a plaster finger cast applied.

Refreshments were served upon their departure, along with a bag of goodies, and an OR pamphlet designed with activities for coloring, word search, match the bones, and educational explanations of some of our responsibilities.

A good time was had by all; Perhaps we even have a few future Nurses and Doctors among our participants!!!
Degrees:
Rick Luna RN, MSN, Cal State Dominguez Hills, August 2010

Administrative Nurse II:
Uriel Dualos RN, BSN

Clinical Nurse IV:
Netta Cohenca RN, BSN
Jan Hofer RN, BSN
Kathy Kuttler RN

Clinical Nurse III:
Robin Adduono RN
Rowina Basa RN, BSN
Janet Jackson RN, BSN
Kim Broms RN, BSN
Renee Pink RN
Lynn Gardea RN
Elvie Porcadas RN, BSN
Louise Barr RN, BSN
Angela Cloud RN, BSN
Lindsay Cosco RN, BSN
Edna Culp RN, BSN
Anne Dahlerup RN, BSN
Janice Hahlbohm RN, BSN
Evy Hostetler RN, BSN
William McManaman RN, BSN
Dee Parks RN, ASN
Nancy Li RN, BSN
Carrie Tusi RN
Regina Martin RN
Sharon Landes RN, BSN
Dalia Tayag RN, BSN
Angela White RN, BSN
Anthony Arena, RN, BSN
Dolores Ayapana, RN
Maria Pulido, RN, BSN
Elaine Soliven, RN
Renee Turner, RN
Kirsten Thomas, RN
Nancy Szarek RN
Teresa Crum RN, BSN
Kim Jaszewski RN, BSN
Trudy LeCuyer RN
Cora Lindawan RN, BSN
Pat Morris RN
Vilai Petchcharoporn RN, BA
Teresa Ray RN, BSN
Karen Roussos RN

Professional Certifications In Perioperative Services:
According to the AACN website obtaining a certification in an area of nursing practice is a voluntary process that validates knowledge, skills and abilities beyond the scope of RN licensure and one which conveys benefit for patients, families, employers and nurses. The value of certification is increasingly supported by current research which is demonstrated by the growing number of certified nurses on our staff. UC San Diego Medical Center is proud to be creating a “Culture of Certification” to promote and support certified nursing practice...

Kathy Thompson RN, MBA, BSHA, CNOR
Esther Lee RN, MBA, CHELP
Lynne Blaner RN, BSN, CNOR
Vina Limson RN, BSN, CNOR
Christine Thompson RN, BSN, CNOR
Netta Cohenca RN, BSN, RNFA, CNOR
Dolores Ayapana RN, BSN, CEN
Kirsten Thomas RN, CNOR
Renee Turner RN, C-OB
Sofia Ilusorio RN, BSN, CNOR
Elaine Soliven RN, BSN, CPAN
Remedios Babanto RN, AANC

UC San Diego Medical Center Is Proud To Acknowledge:

Jessica Goggin RN, BSN
Winner of the 2010 California Nurse Week Excellence Award in the category of Clinical Care.

Jessica is the nurse coordinator for the Adult Cystic Fibrosis Program at UC San Diego Medical Center. Nominated by her peers, Jessica was recognized for her many accomplishments and specifically for her practice of assessing a need, great or small, personal or institutional, and utilizing every resource at her disposal to meet that need, whether for her patients, her colleagues, or the CF program.
Daisy Award:
The Daisy Foundation was established in 1999 in memory of J. Patrick Barnes, who died at age 33 of complications related to ITP. His family established the award to recognize extraordinary nurses everywhere who serve as role models in our nursing community by consistently demonstrating excellence through their clinical expertise and their extraordinarily compassionate care. Nominations come from many sources: patients, visitors, other nurses, physicians and hospital employees. UC San Diego Medical Center is a proud Daisy Award Hospital Partner for this year's award.

OUR FALL 2010 DAISY AWARD WINNERS:

Mary Ozaki RN
11 West Medical Surgical Unit

Jennifer Ballard RN, BSN
Burn ICU

Anne Powers RN, MSN, NP
Interventional Pulmonology
Embrace the vision. Join us at UCSD.

For current opportunities, both internal and external, please log on to www.ucsdhcjobs.org. For more information about nursing at UCSD, log on to our nursing website at http://medinfo.ucsd.edu/nursing.