

THE ASA M SENSOR

Volume 4, Number 3

July 1994

THE QUARTERLY NEWSLETTER OF THE
AMERICAN SOCIETY OF ANESTHESIA TECHNOLOGISTS AND TECHNICIANS

PRESIDENT'S MESSAGE ...

by Lee Amorin

TO CERTIFY, OR NOT TO CERTIFY?

Since the formal organization of the ASATT in 1989, one of the major goals of the Society has been to establish a process by which Anesthesia Technicians throughout the United States could verify their level of knowledge and skills. It is widely accepted that there needs to be a standardization of training, job titles and duties for anesthesia technical support personnel. There also must be a means by which their ability to function in that capacity can be measured. Webster defines 'Certify': to guarantee as meeting a standard. And 'Certificate': a document certifying that a person may officially practice a specific profession. Simply put, certification of anesthesia technical support personnel will provide a means to measure competence.

During the recent mid year ASATT Board of Directors' meeting, your Board confirmed their commitment to move forward with the certification process. Dennis McMahon has over the past several months been the Chairperson of the Cer-

tification Committee and has done an outstanding job in guiding us through this enormous task. Having brought us to the point where we can see a glimmer of light at the end of the tunnel, Dennis has stepped down as Chairperson but will remain active on the committee. As a member of this committee, and due to the importance of its activities, both the Board and I felt it wise that I fill this role for the months leading into our annual meeting. Much work remains to be accomplished before testing can commence, but I feel that we are on the right track; with the continued support of our membership and the Anesthesia Care Team members in general, we will have a certification process that is both valid and defensible.

However, there are two questions that keep recurring to me. Are we putting the cart before the horse? And, are all of the anesthesia technicians and technologists out there who are screaming for certification really ready? By the cart

Continued on Page 12

Inside your Sensor:

The View From...

Kiwi country -

Current Technology...

Saving those cells -

The Self-Exam...

So how did we do?

Coming Events...

*State Meetings,
Regional Meetings,
and THE Meetings!*

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The opinions expressed herein are those of individual authors, and do not necessarily reflect the views or opinions of the ASATT.

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Associate Editor: Dennis McMahan, Virginia Mason Medical Center, Seattle, WA 98111 206-223-6980 (Work)

All submissions pertinent to the objectives of the ASATT will be considered for publication. Photographs, preferably black-&-white, are also welcome and will be returned.

Deadline for the next issue is September 1, 1994.

Printed on recycled paper.



**GREENLANE/NATIONAL WOMEN'S
HOSPITAL
AUCKLAND, NEW ZEALAND**

by Maretta Grandona

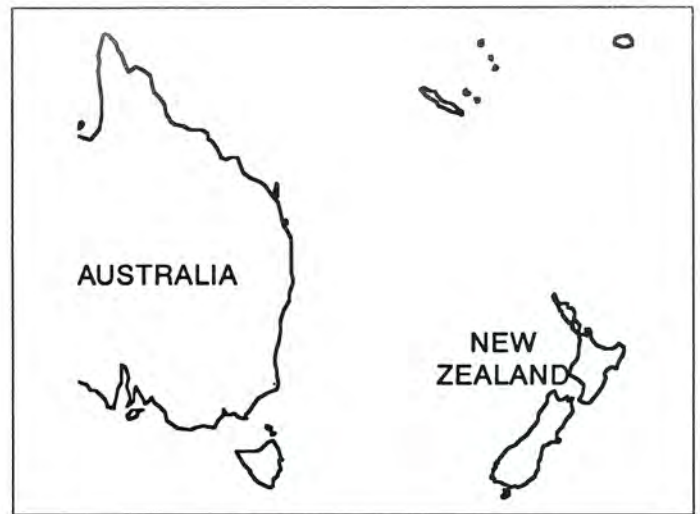
Auckland is a large sprawling city of approximately 1 million people. It is commonly referred to by the locals as "The City of Sails" due to the fact that it is bordered by the Tasman Sea on one side and the Pacific Ocean on the other. Greenlane/National Women's Hospital is nestled at the base of One Tree Hill, an extinct volcano, which is surrounded by a large park that provides a pleasant retreat for visitors and staff alike. The surgeons and anesthesiologists can often be seen running like mountain goats up the side of One Tree Hill between operating lists.

GLH has a large cardiothoracic and vascular unit. It deals with all types of adult cardiac surgery, including cardiac transplantation. In 1993 we performed the first lung transplant in New Zealand. GLH is the national referral center for pediatric cardiac surgery. In addition, we deal with all types of vascular surgery, both elective and acute.

In 1990, GLH amalgamated with NWH (the largest obstetric unit in New Zealand) which is on the same site. NWH carries a busy obstetric and gynecology workload, performing both elective and acute surgery, and providing level I, II, and III neonatal intensive care. GLH has a busy ENT department and is also the Auckland referral center for head and neck surgery.

There are 7 operating rooms on the GLH main floor, 4 at NWH, and 2 in the day surgery unit. When I was employed there, we had 11 positions for anesthetic technicians. We provided 24-hour coverage, 7 days a week. There were technicians on site at GLH from 0700-2330 Monday-Friday, and 0800-1630 Saturday and Sunday, with on-call people covering the rest of the time. One technician worked full-time from 0800-1630 in the day surgery unit. NWH had a technician on site from 0800-1630 Monday-Friday, and on-call coverage at other times.

The duties of the technicians included preparation and maintenance of anesthesia and monitoring equipment; trouble-shooting; clinical assistance with induction, maintenance, and emergence from anesthesia; clean-up and room turnaround between cases; inventory control; budgeting; and evaluation of new products and equipment. The general philosophy was that wherever there was an anesthesiologist, there should be a technician...not always possible, but we tried. Technicians in NZ often take on the role that is performed by respiratory therapists in the USA, so we often worked with the anesthesiologist in the ICU, and one of our roles was to clean, test, and trouble-shoot the ICU ventilators.



NZ has had anesthetic technicians since the 1960's. In the 1970's, a national training scheme was implemented. It is a 2-year inservice program. Guidelines and the syllabus are set by the national training committee who oversees the training program. The committee is made up of anesthesiologists, anesthetic technicians, and a representative of the NZ nurses' association. Each training hospital develops its own teaching program within the guidelines set by the committee. Individual hospitals must meet certain requirements approved by the training committee before employing trainee anesthetic technicians. The syllabus includes hospital organization, anesthesia, science, microbiology and sterilization, and anatomy and physiology. Trainees must attend a minimum number of lectures and have at least 18 months clinical experience before being eligible to take the final exam. The exam is in 3 parts—written, oral, and practical. A pass is required in all 3 areas. Qualifying technicians are then awarded a certificate of proficiency in anesthesia. The examiners are drawn from the training committee and at least one must be an anesthesiologist; the second examiner is usually an anesthetic technician, but may also be a second anesthesiologist.

When I left NZ in 1993, the training committee was making good progress on moving the training into a college setting, possibly as a correspondence course, with continued emphasis on employment in a clinical setting to develop and maintain the hands-on skills that cannot be taught in a classroom.

CELL SAVING: COLLECTION AND PROCESSING

by John Haire
Fairfax, VA

The average person has an adequate blood volume comprised of the blood components necessary to provide the body with the services that blood provides. However, rapid and/or extreme blood volume loss will compromise this state of balance. Cell saving or autotransfusion [transfusion in which the blood donor and recipient are the same person], is one available method of reinstating hemodynamic balance when it has been compromised by blood volume reduction.

Cell saving begins with the aspiration of shed blood from the operative site. Pooled blood is aspirated via a double lumen suction assembly. The smaller lumen of the assembly transports anticoagulant fluid to the distal end of the assembly where it connects to the larger lumen in the suction tip adapter "Y" (Figure 1). This design allows for collected blood to be anticoagulated before it reaches the cardiotomy reservoir.

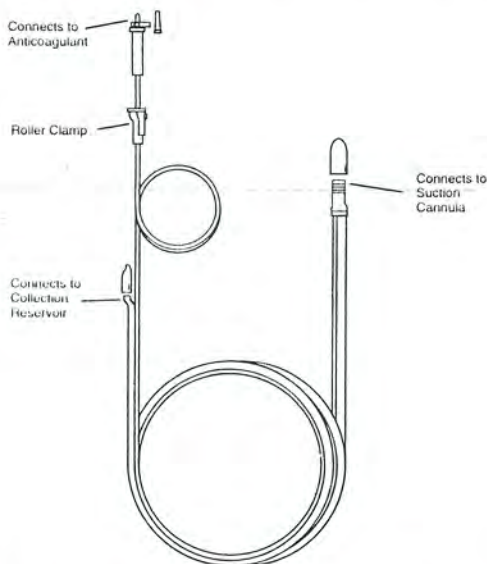


Figure 1.

Citrate (CPD, ACD, etc.) is recommended for anticoagulation. Ratios of 1:5 to 1:10 citrate to blood should be maintained. Heparinized saline may be used at a mixture of 30,000iu heparin in 1000ml of sterile injectable 0.9% NaCl solution. A heparin solution to blood ratio of 1:5 should be maintained resulting in 3.5 to 5.1 iu/cc of collected blood. Observance of "snowy" deposits (i.e. platelets [thrombocytes, an element of blood with coagulating properties]) in the suction tubing indicates inadequate anticoagulation ratios.

Gross contaminants, malignant tissue, amniotic fluid, hemostatic agents [which stop or prevent blood loss], Povidone-iodine solutions, water, and hot solutions (over 42o C) must never be aspirated. Aspiration of topical antibiotic solutions will require an excessive wash volume at slow speed. Care should be taken to prevent the aspiration of debris and tissue. Skimming (the aspiration of blood and air) should be strictly avoided.

Vacuum pressure must be strictly regulated throughout the aspiration process. Aspiration results in the non-preventable loss of potent cells due to damage caused by travel turbulence. Higher pressures result in higher loss ratios. To minimize potent cell losses, vacuum pressures of 80 to 100 mmHg are recommended and should never exceed 150 mmHg.

Aspirated blood is collected in a graduated cardiotomy reservoir. Recommended reservoirs utilize a 40 micron filter coated with an anti-foam agent. Such filters will remove any gross debris and coagulated cells. Collected cells are held in the reservoir until an adequate processing volume is collected, generally two to three times the centrifuge bowl volume. However, several factors can affect processing volume determination including patient status, collected blood quality, presence of irrigation, and situation immediacy.

Cells and wash fluid are transported to and from the centrifuge bowl via the harness assembly (Figure 2). Fluid flow is controlled by automated clamps and regulated by a central pump:

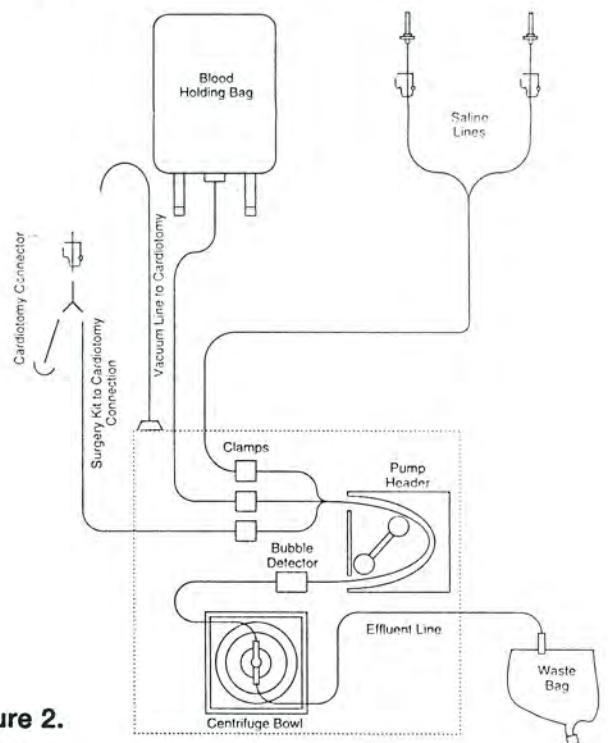


Figure 2.

Processing procedures tend to be device dependent due to inherent limitations and features. However, they all follow the same general sequence. The centrifuge is activated and brought to recommended speed. The bowl is then filled with collected cells from the reservoir. Slower fill speeds will result in higher post-process hematocrit values [percentage of blood volume comprised of red cells (erythrocytes)]. A partially filled bowl should never be processed; the volume should either be returned to the reservoir, concentrated, or discarded. Process and delivery of an inadequately filled bowl can result in serious patient complications.

TECHNICALLY SPEAKING

by Wes Simpson II
San Diego, CA

This edition of Technically Speaking covers two main topics: clinical issues surrounding monitoring techniques, and nitric oxide (NO). The monitoring citations offer information that can help interpret the data which is presented to us. Nitric oxide is one of the current "hot topics" that may alter the practice of anesthesia for some time to come.

Nitric Oxide (NO) is a clear, colorless gas which along with carbon monoxide (CO) and ozone, make up the bulk of air pollution problems in North America. Ironically, NO may be the next gas added to anesthesia machines and respiratory ventilators. NO is synthesized by the body in minute quantities and accounts for the biological properties of endothelium-derived relaxing factor (EDRF). This potent, highly selective pulmonary vasodilator is currently classified as an investigational drug, but will likely be released in the near future. As a result, it is time to start learning about what may rapidly become a part of the therapeutic milieu.

Breen PH, Mazumdar B, Skinner SC: Capnometer transport delay: measurement and clinical implications. *Anesth Analg* 78:864-6, 1994.

Sidestream capnography values and waveforms are displayed in delayed time rather than real time mode. This is due to transport delay time caused by the sample tubing and the dynamic response of the measurement cuvette. Transport delay time may influence a false diagnosis of esophageal intubation or the underestimation of PETCO₂ during rapid respiratory rates. The authors measured and compared transport delays for six popular monitors. The methods they employed can be used for any monitor you may currently use. Transport delay times should be recalculated whenever you make a change in the sampling system - i.e. a change in tubing length or diameter, sample T, or moisture trap.

Karan SM, Crawl F, Muldoon SM: Malignant hyperthermia masked by capnographic monitoring. *Anesth Analg* 78:590-2, 1994.

Rapid increases of end-tidal carbon dioxide (ETCO₂) concentrations have been identified as one of the earliest signs of a malignant hyperthermia (MH) episode. This case report provides documentation of a progressive clinical episode of MH in which the use of capnographic monitoring may have inadvertently complicated the diagnosis of the syndrome. The case may also represent a modern clinical presentation of MH in the face of current monitoring technology and extremely early supportive care.

Morley PT, Lee B, Cade JF: Factors affecting the accuracy of pulse oximeters. (Abstract) *Anaesth Intens Care* 22(2):213, 1994.

This study compares bias and variability of the Nellcor N-100, Nellcor N-200, Ohmeda Biox 3700, Criticare CSI 501+, and the Radiometer ABL3 blood gas analyzer against a fractionalsaturation monitor (HbO₂, Radiometer OSM3). The parameters

associated with significant increases in bias and variability are listed, and the specific changes are listed for each monitor.

McNulty SE, Cooper M, Staudt S: Transmitted radio frequency current through a flow directed pulmonary artery catheter. *Anesth Analg* 78:587-9, 1994.

This article consists of two case reports of transient ventricular ectopy and nonsustained ventricular tachycardia initiated by electrosurgical unit (ESU) activation in patients with indwelling REF oximetry PA catheters. Specific precautions you should take to prevent these episodes are discussed.

Tibballs J: The role of nitric oxide (formerly endothelium-derived relaxing factor [EDRF]) in vasodilation and vasodilator therapy. *Anaesth Intens Care* 21(6):759-773, 1993.

This extensive review article is an excellent NO primer. The article traces the series of events which led to the recognition, identification, and use of NO as a therapeutic agent. The clinical relevance of NO and practical guidelines are also discussed. 158 citations are referenced for further study.

Tibballs J: Clinical applications of gaseous nitric oxide. *Anaesth Intens Care* 21(6):866-871, 1993.

Seven case studies are presented in this paper. The role of NO versus nitrovasodilators such as nitroglycerine and sodium nitroprusside is discussed. NO is currently the only specific pulmonary vasodilator available.

Rimar S, Gillis NC: Pulmonary vasodilation by inhaled nitric oxide after endothelial injury. *J. Appl Physiol* 73(5):2179-2183, 1992.

This animal lab study concludes that inhaled NO reverses pulmonary vasoconstriction in the perfused lung, and that vasodilation is unaffected by free radical injury. It concludes that inhaled NO may provide an effective means of treating acute

OFFICIAL SOCIETY NOTICE

Members of the Society are hereby given notice of the following dates pertaining to official business:

The next meeting of the Board of Directors will be held on October 14, 1994 at the Holiday Inn, San Francisco International Airport. Those individuals with items for the Board's review or those who would like to address the Board, must make their intentions known in writing no later than September 30, 1994.

Those individuals with proposed amendments to the Bylaws shall submit these in writing to the Board no later than August 15, 1994. Proposed amendments will be reviewed by the Board and presented to the membership for discussion at the annual business meeting on October 16, 1994.

OFFICIAL SOCIETY NOTICE

The 1994 officer elections began on June 20th when nomination notices were sent to all active members. Nominations for Vice-President/President Elect will be solicited from all regions, and nominations for Regional Director will be solicited for:

Region 2: PA, MD, OH, IN, MI, VA, WV, DE
Region 4: WI, IL, MO, MN, ND, SD, IA and
Region 6: CA, NV, UT, AZ, NM, TX

Election ballots will be sent to all active members on August 26th, 1994 and the election will conclude on September 26th.

Election results will be published in the October issue of this newsletter.

ATTENTION STATE SOCIETY PRESIDENTS:

There will be a joint meeting of the ASATT Board of Directors and the state society presidents on Friday, October 14 from 1:00-5:00pm in the boardroom at the Holiday Inn in South San Francisco. This meeting will follow the regular Board of Directors Meeting that morning and will precede the Fifth Annual ASATT Meeting and Education Program beginning Saturday, October 15.

All state society presidents are strongly urged to attend this meeting to represent their membership.

AROUND THE THREE RIVERS IN PITTSBURGH...

by Wilma Frisco, Director, Region 2

Region 2 held a one-day seminar at the University of Pittsburgh Medical Center on May 14, 1994. Patricia Carlson, Chief Anesthesia Technician at Montefiore University Hospital and Carol Wisotzki, Special Events Coordinator at the University of Pittsburgh Medical Center, organized the seminar. In attendance were 31 anesthesia technicians from Washington, D.C., Virginia, West Virginia, Ohio, Michigan, and Pennsylvania.

The morning session was devoted to four educational topics: anesthesia ventilators, thoracic anesthesia, regional anesthesia, and electrical safety in the OR. The afternoon session included a vendor fair with representatives from several large companies. The seminar ended with a question and answer discussion pertaining to the progress of ASATT. Vicki Carse, Anesthesia Technician at Mercy Hospital, was introduced as President of the Pennsylvania Society of Anesthesia Technicians.

As the Director of Region 2, I would like to take this opportunity to say to the technicians in this region that you are doing a tremendous job. I commend you for your unselfish devotion and dedication to the progress of the ASATT. The society will be successful because it is composed of dedicated members, as you have proven to be! I am proud to serve with you.

RECENT LITERATURE...continued from page 5

pulmonary hypertension, particularly in the presence of pulmonary endothelial injury.

Tibballs J, Hochman M, Carter B, Osborne A: An appraisal of techniques for administration of gaseous nitric oxide. *Anaesth Intens Care* 21(6):844-847, 1993. *Two different techniques for delivery of inhaled NO are contrasted. The equipment needed is described and diagrammed, and relative merits of each system is discussed.*

Watkins DN, Jenkins IR, Rankin JM, Clarke GM: Inhaled nitric oxide in severe acute respiratory failure, its use in intensive care, and description of a delivery system. *Anaesth Intens Care* 21(6):861-875, 1993. *The use of NO in two cases of severe respiratory failure associated with acute pulmonary hypertension and profound hypoxemia is described. The equipment developed by the hospital for adding NO to the breathing circuit is also detailed.*

Wisdom in the West!



The Fifth Annual ASATT Meeting & Educational Program

Saturday thru Monday, October 15-17, 1994

South San Francisco Convention Center

South San Francisco, California

5 Minutes from the airport,

15 Minutes from Downtown San Francisco



Anesthesia Machine Workshops

by
North American Drager
and
Ohmeda

> *Theory & Function*

> *Pre-Use Checkout*

> *Troubleshooting*

Presentations on:

> *Muscle Relaxants*

> *Anesthesia Tech Training*

> *Management of M. H. cases*

> *Anesthesia for Thoracic cases*

**New this year? Free admission to the ASA Exhibit Hall at the Mosconi Center
for all ASATT Meeting registrants.**

Full program to be mailed by August 1st.

SUMMARY OF THE '94 SELF-EXAMINATION SCORES

VALIDATION:

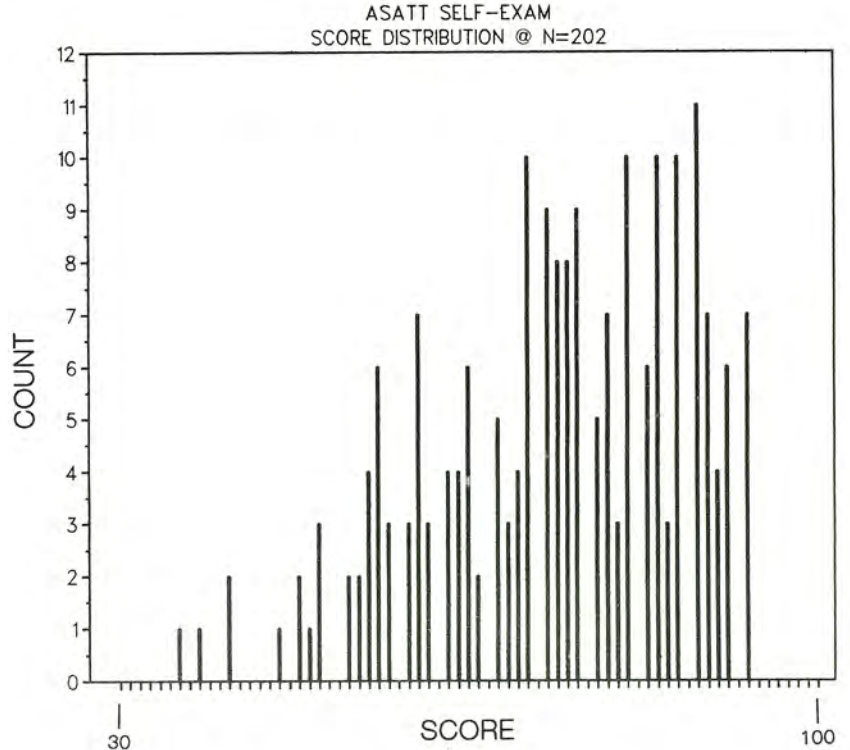
Exams mailed: 640
 Exams returned: 202
 Proportion: 32%

Participation by Region:

	% Membership:	% Returns:
Region 1:	13	15
Region 2:	27	26
Region 3:	17	20
Region 4:	12	8
Region 5:	7	7
Region 6:	14	16
Region 7:	9	7

SCORES:

Average Score: 73.7%
 Median Score: 75%
 Lowest Score: 36%
 Highest Score: 93%



Average Score by Exam Topic:

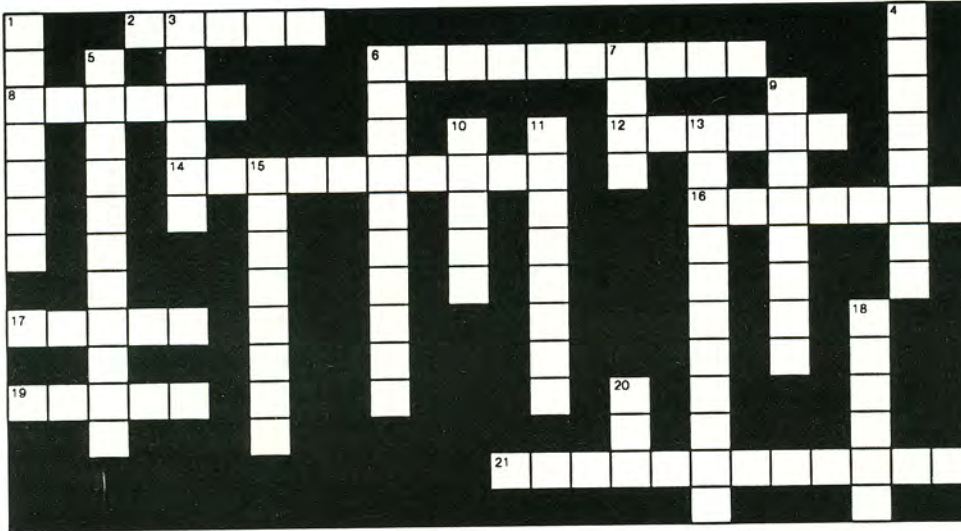
Topic	Questions	Average Score	Std Deviation:
1) Environmental Safety & Sterile Technique	(10 questions):	78%	1.3
2) Gas Supply	(5 questions):	62%	1.4
3) The Anesthesia Machine	(10 questions):	55%	2.1
4) Vaporizers	(5 questions):	80%	1.0
5) Ventilators	(5 questions):	76%	1.0
6) Scavenging	(5 questions):	78%	1.1
7) Breathing Systems	(10 questions):	75%	2.1
8) The Airway	(10 questions):	77%	1.8
9) Monitoring	(10 questions):	78%	1.6
10) Pharmaceuticals	(10 questions):	79%	1.5

The average score is the sum of all scores divided by the number of returns, while the median is the "50%" point for the returned exams (ie half of the members scored below this point, half above). The two values differ slightly due to the asymmetrical curve of the scores (graph above).

The average scores for each of the topic sections of the exam are more revealing. Clearly, the weaker scores in the areas of gas supply and the anesthesia machine suggest that, as a group, we are not as familiar with these topics as we could be. The standard deviation for each section indicates how wide the curve is for all the scores in that section, ie how much the scores vary. The relatively higher standard deviations for the sections on breathing systems, the airway, and (to a lesser degree) monitoring and pharmaceuticals suggest that these are weak areas for some of us.

Four answer sheets were returned with ambiguous or unidentifiable membership numbers; if you did not receive a scored answer sheet, please contact the ASATT office.

While this was not a certification exam, it provides us with a valuable baseline from which to develop a certifying process. And while some of us may not have scored as well as we would have liked, it provides a reference for us with which to detect those areas that we need to strengthen in order to meet the changing needs of the clinicians we work with, and the patients we work for.



ANSWERS TO PREVIOUS PUZZLE: BELOW

MONITORING I: *Gases, Temperature, Cardiac Output, Nerve Stimulators*

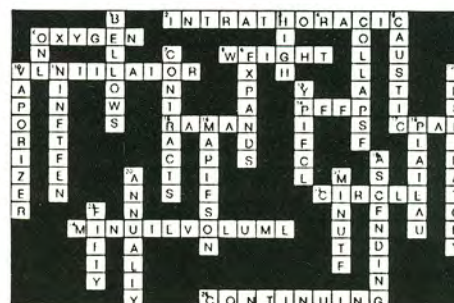
ACROSS:

- 2 Nerve stimulators are used to check the degree of neuromuscular _____.
- 6 Device that displays the CO2 waveform with each breath.
- 8 Tidal volume is the volume of each _____.
- 12 Continuous pulses from a nerve stimulator at 50 or 100/second can cause _____.
- 14 A thermistor measures temperature by changes in electrical _____.
- 16 Respiratory CO2 values are usually measured in millimeters of _____.
- 17 All gas monitors should have a means to trap _____ in sample line.
- 19 A nerve stimulator can also be used to locate a _____ for regional blocks.
- 21 CO2 is the primary indicator of correct placement of the _____ tube.

- 7 The CO2 waveform can also be used to determine respiratory _____.
- 9 A plugged scavenging system may be detected by an _____ in airway pressure.
- 10 Cardiac output multiplied by body surface gives cardiac _____.
- 11 A leak in the patient circuit can be detected as a _____ in tidal volume.
- 13 Cardiac output is usually measured by detecting a shift in _____ in the pulmonary artery.
- 15 Several cardiac functions are measured by the use of a _____ catheter.
- 18 The exhaled gases from a patient breathing room air contain about 16% _____.
- 20 "Train of Four" refers to four nerve stimulator pulses over a _____ second period.

DOWN:

- 1 Term for abnormally high body temperature.
- 3 Cardiac output is measured in _____ per minute.
- 4 CO2 and anesthetic agents are detected in most monitors by _____ absorption.
- 5 Airway pressure is measured in _____ of water.
- 6 Normal body temperature is about 37° _____.



ANSWERS TO PREVIOUS PUZZLE:

REGIONAL SOCIETY ACTIVITIES...

Let us announce what's happening in your area. Send a brief report of recent or future activities for the next issue by May 31 to Dianne Holley. Send newsletters, if available, or give your info on my answering machine if I'm not home. Photos (captioned) are also welcome.

ASATT Region 1:

New York City was the location of a regional meeting on June 4 at the LaGuardia Marriott.

For further information:

Jacqueline Pollack at (718) 283-7188 [work]
or (718) 979-8644 [home].

New York:

For information on future events:

John Armstrong at NYSATA, P.O. Box 23073, Rochester, NY 14692-3073.

ASATT Region 2:

See "Around the Three Rivers in Pittsburgh" on pg. 6

For further information:

Wilma Frisco at (216) 541-5710.

Maryland/DC:

For information on future events:

Robert Bowling at (410) 225-8176.

Michigan:

For information on future events:

Louise Martin at (313) 593-7696 or Jim McEvoy at (313) 343-4766.

Ohio:

July is vacation time for the **Ohio Society of Anesthesia Technologists and Technicians**, but the monthly educational schedule resumes in August with the topic being Regional Anesthesia: Spinal and Epidural Review. A one-day state meeting is slated for September in Zanesville, and the October inservice focuses on triple-lumen IV lines and pulmonary artery catheters. The regular monthly meetings are held on the fourth Saturday of the month.

For further information:

Wilma Frisco at (216) 541-5710.

Pennsylvania:

The **Pennsylvania Society of Anesthesia Technicians** introduced Vicki Carse of Mercy Hospital as their new president at the Region 2 Annual Meeting in Pittsburgh.

For further information:

Wilma Frisco at (216) 541-5710.

Virginia:

Cost containment, awareness and recall in anesthesia, JCAHO, and quality management were some of the topics discussed at the **Virginia Society of Technologists and Technicians** meeting in Roanoke on June 11.

For further information:

Linda Ferris at (703) 985-8351.

ASATT Region 3:

Florida:

The **Florida Society of Anesthesia Technologists and Technicians** held one-day meetings on April 30 and July 9. The FSATT Annual Seminar will be a two-day event taking place in Gainesville on September 24-25. The state-of-the-art Gainesville Anesthesia Simulator at Shands Memorial Hospital will be available for instructional purposes.

For further information:

Jerry Guttery at (904) 374-6051 [work] or (904) 472-3925 [home].

Georgia:

The newly organized **Georgia Society of Anesthesia Technologists and Technicians** plans its first meeting for Saturday, August 20th in Atlanta, from 9am to 4pm, with four speakers and a variety of exhibitors.

For further information:

Alfred Yin at (404) 612-9828.

North Carolina:

Members of the **North Carolina Society of Anesthesia Technicians** will travel to Myrtle Beach, SC for their first annual meeting on September 30-October 2. They will meet in conjunction with the North Carolina Society of Anesthesiologists.

For further information:

Kathline Leahan at (919) 681-5228.

Tennessee:

Forty-five anesthesia technicians were thoroughly educated at the **Association of Anesthesia Technicians and Technologists of Tennessee** seminar on April 30 in Nashville. Another meeting is tentatively being scheduled for the fall to elect officers. AATTT address is P.O. Box 218161, Nashville, TN 37221.

For further information:

Sharon Baskette at (615) 322-4000 [work] or (615) 646-1599 [home], or

Tammie Carr at (615) 322-4000.

ASATT Region 4:

A regional meeting is being planned in conjunction with the **Illinois Society of Anesthesia Technicians** on November 5th at the Hyatt Regency in Schumburg, IL.

For further information:

Jim Underwood at (309) 968-6998.

Illinois:

See "ASATT Region 4".

For further information:

Jim Underwood at (309) 968-6998.

Iowa:

The first organizational meeting of the **Iowa Society of Anesthesia Technologists and Technicians** took place on April 20 at Iowa Methodist Hospital in Des Moines. An educational program and lunch were provided. Another meeting was held on May 21.

For further information:

Sheila White at (319) 589-8665[work] or (319) 556-8234[home].

Wisconsin:

For information on future events:

Noreen Soeller at (715) 387-7179 [work] or (715) 387-4792 [home].

ASATT Region 5:

A one-day regional seminar is slated for July 16 at University Hospital in Denver. Several highly qualified speakers are being featured and a certificate of attendance will be provided at the end of the seminar.

For further information:

Ann Martin at (303) 270-8275 [work] or (303) 987-3907 [home].

Colorado:

The **Colorado Society of Anesthesia Technicians** met on May 23 to attend an educational inservice on anesthesia machines. Regular meetings will be resumed in the months following the regional meeting on July 16.

For further information:

Teresa Chavez at (303) 320-2121 x 2113, or Ann Martin at (303) 270-8275.

Mississippi:

A new state society is being formed in Mississippi. On May 14, anesthesia technicians met for an educational meeting and to elect temporary officers: Earl Coleman, President; Allan Patterson, Secretary; and Tony McLaurin, Treasurer. Another meeting is scheduled for July 21, and in September, an educational meeting will be held in Hattysburg.

For further information:

Earl Coleman at (601) 984-5900, or Nancy Marrit at (601) 968-6132.

ASATT Region 6:

Come to Chandler, AZ near Phoenix for the Region 6 Meeting and Seminar. Chandler Regional Hospital hosts the event on August 6.

For further information:

Dean Rux at (602) 821-3315 [work] or (602) 497-9709 [home].

California:

The **California Society of Anesthesia Technologists and Technicians** hosted a very successful Tenth Annual Meeting May 20-22 in Monterey. Recently elected CSATT officers are Ron Turner, President; Glen Sutfin, Vice-President (408) 299-6341; Mindy Bradley, Secretary/Treasurer; and Steve Musante, Newsletter Editor (916) 423-6181.

For further information:

Ron Turner at (510) 674-2241.

Texas:

Cypress-Fairbanks Medical Center in Houston hosted the **Texas Society of Anesthesia Technology** business and educational meeting on June 18. Topics included cardiac monitoring, anesthesia drugs, and several "hands-on" demonstrations and exhibits. The next statewide meeting will be on Sept 10 in San Antonio. [Raul Sanchez at (210) 675-1564], Dallas [Kyle Logsdon at (214) 820-2165], Austin [Dianne Holley], Houston [Freida Francis(713) 397-0206], and El Paso [Estella Ramirez at (915) 544-0606].

For further information:

Dianne Holley at (512) 451-7457.

ASATT Region 7:

The 2nd Annual Region 7 Meeting and Seminar took place on April 16th in Bellevue, Washington. Forty anesthesia technicians attended the meeting.

For further information:

Ruth Ochoa at (503) 370-5200 pager 225[work], or (503) 390-0736[home].

Oregon:

The **Oregon Society of Anesthesia Technologists and Technicians** held a one-day seminar on June 4 at the VA Hospital in Portland.

For further information:

Dave Mastalski at (503) 642-1537, or Guy Buckman at (503) 370-5200 pgr 227.

Washington:

Dr Nancy Grey was the speaker for the **Northwest Society of Anesthesia Technology** meeting at Harrison Memorial Hospital in Bremerton on May 14, on the topics of double-lumen tubes and the laryngeal mask airway. Our next meeting is scheduled for September.

For further information:

Don Millbauer at (206) 228-3450.

ASATT REPRESENTATIVE TO ATTEND AANA ANNUAL MEETING

Chris Patterson, ASATT Vice-President, will represent ASATT at the American Association of Nurse Anesthetists (AANA) 61st Annual Meeting in Washington, D.C. on August 13-18. She will be introduced to the AANA membership during the opening and closing ceremonies. President Bill Clinton is also expected to be in attendance to accept an award from AANA. Chris and four anesthesia technicians from Washington, D.C. will host the ASATT information booth at the exhibit hall during the seminar.

before the horse I mean, should we be working on certification when what is needed are well developed training programs that operate using the Training Guidelines recommended by the ASATT. There are currently few established courses for training anesthesia support personnel. Most of us have learned our specialty by on-the-job training and attending whatever seminars we could. The results of our 'Self-Examination for Anesthesia Technicians' show that we have some very knowledgeable members, and also some that there are those who need more training and education. So, where does this leave us? With the current challenges that are being directed toward members of the allied health-care professions to justify and defend their right to provide patient care, and the changing government controls, I feel that certification is a necessity. This will show that we have met established standards and have the right to officially practice our profession. The establishment of training courses is also an urgent need and one that the Society will focus attention on during the year ahead. I am encouraged by the fact that we have received inquiries from several institutions of higher education who are exploring establishment of a curriculum for the training of anesthesia technicians and who seek our advice.

Meanwhile, it is up to each of us to take advantage of every educational opportunity that we can. It is our responsibility to make sure that we have the knowledge and training necessary to pass a certification test. The ASATT this year began providing regional seminars in addition to the Annual Meeting. I urge you to attend these meetings when possible. Many local technical societies also provide educational material along with their meetings. Participate and be supportive by volunteering your assistance. Hospitals are mandated by JCAHO to provide training for their employees; make sure that yours is fulfilling this obligation on a regular basis. And last but not least, self-education is always available. Pick up a book on the practice of anesthesia and its related equipment. There are dozens of journals that are on the market and readily available. Whether just entering the field or having served the role for many years, on-going education should be a reality of life, just as it is in any other profession.

In closing, I would like to take this opportunity to invite you to attend the ASATT's Fifth Annual Meeting and Seminar in San Francisco. Come and participate in the comradery and take advantage of an excellent opportunity to increase your knowledge and skills. Come to the 'City by the Bay' and be part of an enlightening experience!

Upon filling, centrifugal force causes immediate blood component separation based upon each component's specific gravity, or density. Erythrocytes [red blood cells—primary function is to use hemoglobin to deliver oxygen to body tissues] are the most dense and are layered to the outer-most portion of the bowl. Leukocytes [white blood cells—primary function is to protect the body from foreign substances and produce antibodies] and platelets are layered next. Plasma is the least dense component and is layered most centrally.

Next, the separated, or packed, cells are washed with normal saline solution (IV). The speed of the wash fluid should never exceed the speed at which the bowl was filled as excessive wash speeds will reduce effectiveness. The principles of centrifugation will cause debris, damaged cells, and plasma to wash or displace into the waste bag as the wash fluid flows through the bowl. 1000ml of wash fluid or three times the bowl volume is necessary for adequate washing. When the fluid, or effluent, spilling into the waste bag is clear, washing is complete.

The remaining cells are emptied from the bowl and into a holding bag. Slower empty speeds will result in a higher hematocrit value. Care should be taken at this point to minimize turbulence-induced aeration in the processed volume. From the holding bag, the cells are once again filtered as they are transferred to an infusion bag. Cells should never be administered directly from the holding bag. Excess air must be removed from the infusion bag prior to administration. Proper labeling is required. Processed blood stored at room temperature (72o F) should be administered within six hours.

Failure to follow proper procedure and recommendations can cause several complications, including air emboli, hemolysis [destruction of red blood cells], increased bleeding, and sepsis. Complications can be minimized by proper aspiration techniques, reduced flow speeds, minimal vacuum pressures, and use of a micro-aggregate filter when transferring processed cells from the holding bag to the infusion bag.

References:

Laffey, Patricia: Principles of Cell Salvaging and Washing Techniques; Autologous Blood Management Workshop. Annapolis, MD. Clinical Perfusionist, Inc.

Myers, Roberta: Introduction to Autologous Blood Management: Principles and Rationale; Autologous Blood Management Workshop. Annapolis, MD. Clinical Perfusionist, Inc.

Myers, Roberta: Introduction to Cell Salvage Devices; Autologous Blood Management Workshop. Annapolis, MD. Clinical Perfusionist, Inc.

Jami Blue was an anesthesia technician who was dedicated to the professional development of anesthesia technologists and technicians. Jami organized and managed several anesthesia technical divisions throughout the state of Colorado. She was the founder of the Colorado Society of Anesthesia Technicians, and was appointed first ASATT Director of Region 5. Because of her zeal and devotion for the field of anesthesia technology, Jami developed the anesthesia technical seminar which is held annually in conjunction with the Colorado Society of Anesthesiologists (CRASH).

In memory of this dynamic and dedicated technician, ASATT has developed "The Jami Blue Lecture Series and Award Presentation". The previous Jami Blue Award recipients are:

1992-93...Wilma Frisco, Cleveland, OH
1993-94...Dale Meyers, Galveston, TX

Because there are more dedicated individuals who are involved in the continued educational and practical advancements of anesthesia technology, ASATT is asking you, the members, to submit your nominees for the "1994-95 Jami Blue Award".

Please call: Wilma Frisco at (216) 541-5710, no later than September 1, 1994.



OHMEDA

THE BOC GROUP

Essentials of Anesthesia Equipment

for anesthesia equipment support personnel and end users

The Ohmeda Technical Training Center is a CEU User member of the International Association for Continuing Education and Training.

Upon successful completion of the course, students will receive 2.0 continuing education credits.

Course Objectives

After attending the Essentials of Anesthesia Equipment class, the attendees should gain:

- A better understanding of theory, pneumatics, design, operation of anesthesia machines, ventilators, and associated monitors.
- Hands-on experience performing preoperative checkout procedures to FDA recommendations.
- Familiarity with and understanding of technical terms for anesthesia equipment, troubleshooting, and applications.
- First level troubleshooting knowledge and skills through theory and hands-on experience.
- Knowledge of manufacturer recommendations for anesthesia equipment cleaning and sterilizing.

Benefits

- Small class size allows for individualized instruction.
- Increase your effectiveness as a communication link between the clinician and the service provider.
- A reduction in service calls to the maintenance provider saves the clinician time and the institution money.
- The attendee should gain a comprehensive understanding of the anesthesia delivery system through theory and hands-on experience.
- Reduction in equipment downtime.

1994 Class Schedule

July 12-14, 1994 – Washington, DC
July 19-21, 1994 – Dallas, TX
July 26-28, 1994 – Kansas City, KA
August 9-11, 1994 – Sioux City, IA
August 16-18, 1994 – Minneapolis, MN
August 24-26, 1994 – St. Louis, MO
September 13-15, 1994 – Chicago, IL
September 20-22, 1994 – Hawaii
September 27-29, 1994 – Detroit, MI

Call for future dates and cities.

If you have questions or need additional course information please call Tessa Gillham, Ohmeda Inc, Technical Training Center at 1-800-345-2700.

Advertising Rates for The Sensor

Effective 1 August 1993

Display Ads: Announcements of products, services, or educational programs relevant to the theory, maintenance, or application of anesthesia technology.

Rates: Display Advertising (camera-ready mechanicals, one-color process):

Half-Page Horizontal	7 1/2" wide x 4 3/4" deep:	\$200 per insertion.
Half-Page Vertical	3 1/2" wide x 9 1/2" deep:	\$200
Quarter Page	3 1/2" wide x 4 3/4" deep:	\$100

Corporate Member Discount: 25%

Classified Ads: Individuals seeking employment, or employers seeking candidates, in anesthesia technical support.

Width: 3 1/2", CG Times type, 12-point. Typeset by editors.

Rate: \$8/line, 5-line minimum

Active Member Discount: 25%

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