
Legal Briefs

GENE A. BLUMENREICH, JD
Nutter, McClennen & Fish
Boston, Massachusetts

Nurse anesthetists in the middle: Covenants not to compete

Key words: Covenant not to compete, employment, tortious interference.

Although anesthesiologists may denigrate the role of nurse anesthetists, some anesthesiologists are so concerned about competing with nurse anesthetists that they require their CRNA employees to agree not to compete. In a recent case in Georgia, two groups of anesthesiologists found the services of a group of nurse anesthetists so important to their ability to provide services at a local medical center that they ended up in a lawsuit (*Carroll Anesthesia Associations, P.C. v Anesthacare, Inc.*, Court of Appeals of Georgia, October 6, 1998, 1998 W.L. 686248 (Ga. App.)).

Carroll Anesthesia Associates ("Carroll") and Anesthacare were anesthesiologist-owned anesthesia groups competing in an area that included Tanner Medical Center. Carroll was either Tanner's exclusive or primary anesthesia provider until 1993. Carroll employed five nurse anesthetists and had required that the CRNAs agree that they would not compete with Carroll in a geographic area that included Tanner for periods ranging from 18 months to 2 years after the termination of their employment. Anesthacare hired away four of the CRNAs. Because the CRNAs were concerned about their agreements not to compete, Anesthacare agreed to indemnify them. If the CRNAs suffered any damage as a result of their employment by Anesthacare, Anesthacare would reimburse them

for their damages and cost. A fifth nurse anesthetist was also recruited but did not accept Anesthacare's offer of employment and testified against Anesthacare. According to the fifth nurse anesthetist, the indemnification agreement was aimed specifically at any legal action Carroll might bring based on the nurse anesthetists' breach of their employment agreements with Carroll. Prior to the expiration of the agreements not to compete, Anesthacare assigned the four nurse anesthetists who had formerly worked for Carroll to work at Tanner.

Carroll brought suit asking the court to order the four nurse anesthetists to stop violating their covenants not to compete by working at Tanner. The Superior Court of Carroll County, Georgia, granted the injunctions, determining that the noncompete agreements were valid and enforceable. Carroll also sued Anesthacare for tortious interference with Carroll's contracts and business relations. Carroll claimed that when Anesthacare agreed to indemnify the CRNAs for expenses of litigation and the award of any judgment, Anesthacare was, in reality, inducing these nurse anesthetists to breach their noncompete agreements. This was wrong, claimed Carroll.

Tortious interference

The trial court held a hearing on the claims of Carroll that this was tortious interference with contractual relations but found no material factual is-

sues either in dispute or that would support Carroll's claims. The trial court granted summary judgment to Anesthacare. Carroll appealed and the appellate court reversed the trial court. The appellate court found that there *were* genuine issues of material fact and summary judgment should not have been granted.

Carroll claimed that Anesthacare had "tortiously interfered with its contractual relations." What did Anesthacare do that was wrong? Is the court saying that any time a competitor succeeds in taking business away from another competitor it is guilty of a tort? Is Anesthacare being punished for winning? Or, was there something about Anesthacare's conduct that went beyond simple competition?

To establish a cause of action for wrongful interference with contractual relations, there must obviously be a valid contract. Beyond that, a plaintiff must show that the defendant:

1. Acted improperly and without privilege.
2. Acted purposely and maliciously with the intent to injure.
3. Induced a third party not to enter into or to continue a business relationship with the plaintiff.
4. Caused the plaintiff some financial injury. "Malice" is assumed if there is unauthorized interference or interference without legal justification or excuse.

The very nature of competition is that one competitor tries to take business away from the rest of its competitors. Unless a business is a public utility, it spends a great deal of its marketing effort trying to convince third parties not to enter or continue business relationships that they may have with competitors. Does this tort make ordinary competition illegal? What did Anesthacare do that was improper and malicious?

Anesthacare had argued that it was entitled to summary judgment because the facts showed that this was only ordinary competition coupled with the hiring of another employer's at-will employees. But the court disagreed. In normal competition, a competitor is merely trying to increase its business. It is not trying to hurt its competitors. Although competitors may be hurt as a byproduct of the competition, that is not the goal. However, when Anesthacare tried to hire all of Carroll's nurse anesthetists and encouraged them to breach their noncompete agreements, Anesthacare engaged in conduct designed more to hurt Carroll than help Anesthacare. There was testimony that Anesthacare lured Carroll's employees by assuring them that after Carroll was destroyed, Anesthacare would bring them back to work at Tanner.

Anesthacare had an absolute right to set up a

competing business to Carroll, but it is not acceptable for a competitor to destroy a competitor or inflict substantial injury by attracting away all of its personnel. Anesthacare could have hired five unrelated nurse anesthetists and tried to win the Tanner contract. Instead, the testimony showed Anesthacare attempted to persuade Carroll's entire nurse anesthetist staff, upon whom Carroll depended, to leave in a group. Anesthacare was not hiring for its needs, it was hiring to deprive Carroll of its ability to perform. If this testimony was believed, this was not ordinary competition; it was an attempt to drive Carroll out of business.

Since there was testimony which if believed would have justified a verdict in Carroll's favor, the appellate court ruled that if this evidence was believed, Anesthacare would not be entitled to judgment so the trial court's grant of summary judgment was improper. A jury must decide whether by hiring the CRNAs as a group and indemnifying them against any judgment obtained by Carroll, Anesthacare interfered with the contracts and encouraged the CRNAs to breach the post-termination terms. The trial court's entry of judgment on this issue must be reversed.

Covenants not to compete

Although the real issue in the *Carroll* case was the interference with contract, the case arose because Carroll had asked the CRNAs to sign covenants not to compete. As the number of anesthesiologists has increased, we have seen an increase in anticompetitive behavior, including an increased usage of covenants not to compete. Since I am sometimes asked about these contracts, let me try to provide information in this column. Before beginning, I must point out that employment and other laws vary greatly from state to state. This article is not intended as legal advice, it is merely a discussion to make nurse anesthetists more aware of the topics. A nurse anesthetist finding himself or herself in a position of being asked to sign any contract including a contract that contains a covenant not to compete should seek competent advice from an attorney familiar with the laws that apply to the employment relationship.

Covenants not to compete whose purpose is only to keep someone from working are often not enforced by the courts. Courts do not like putting people out of work. If the covenant is being used to protect some lawful aspect of the employer's business, such as a trade secret, a covenant not to compete is much more likely to be enforced. In anesthesia, it is hard to imagine what trade secret or confidential information an employer might have that would justify protection by a covenant not to

compete. As we know from the *Carroll* case, some courts will, nonetheless, enforce them. If you find yourself forced into a covenant not to compete, see if you can get the employer to state why it is being required. The lack of a valid purpose might help make it unenforceable.

Assess your bargaining power. Although there may be some circumstances when agreeing to a covenant not to compete would not be harmful, it is never helpful. Will you still be able to keep or get the job if you refuse to sign a covenant not to compete? Even if the covenant not to compete is unenforceable, it can still cause a lot of trouble. Unlike Anesthicare, many employers do not want to hire someone who is subject to a covenant not to compete. Moreover, to get a court to declare the clause unenforceable, you have to go to court. This can be expensive and time consuming even if you win. To many people, the emotional burden of being involved in litigation can be very difficult. Litigation need not be avoided, but it is not a pleasant process and should always be a last option. The expense and other negative aspects of litigation must have been the reason the nurse anesthetists got Anesthicare to indemnify them.

If you have no choice but to sign a covenant not to compete or lose the job or the offer, you then have to weigh the likelihood of finding a new job against the damage that a covenant not to compete can cause. This analysis has to apply to you in your individual situation. While I can mention some things that you might want to consider, every case will differ. In the end, you, and you alone, will have to make the decision.

Be practical. Does the employer have an exclusive contract at the hospitals where you will be prohibited from competing. If the employer already has an exclusive contract, and only the employer can hire nurse anesthetists to administer anesthesia at the hospital, then the noncompetition agreement probably will not have a material effect. You would be unable to work at the hospital anyway. The only issue would be whether the corporation is likely to keep its exclusive contract during the period when you would be prohibited from competing. If the corporation has an exclusive contract and is likely to keep the contract, you appear to be giving up very little when you agree not to compete.

What is the practical effect of being unable to work at the hospitals covered by the noncompete? If the noncompete covers a relatively small number of hospitals in your area and there will be other employment opportunities available to you, it might be easier to agree not to compete than if the noncompete would prohibit you from holding any of the anesthesia positions in your area. In many

states, covenants not to compete are enforceable only if they are appropriately limited as to time and geography. The more limited the area or term, the more likely it is that the contract will be enforced. The term of a noncompete is usually 2 years or less, but there could be circumstances when a longer term would be enforceable.

Note that there are frequently different formulations of the description of the area in which you cannot compete. A standard frequently found in the commercial world such as a salesperson would enter prohibits competition with the former employer in an area described as a radius of a certain number of miles from the employer's principal office. Alternatively, a covenant not to compete might prohibit an employee from working at certain listed hospitals. Watch out for clauses that prohibit you from working for a hospital for which the employer provided services "at any time during the employee's employment with the employer." If you are a long time employee and the employer has not provided anesthesia services at a hospital for many years, there seems little reason why you should be prohibited from providing services at that hospital. Sometimes these agreements contain a provision that if the agreement is deemed to be too broad the court may reduce it to a period of time or geographic area which the court determines is enforceable.

If you have bargaining power with the employer you might ask for a difference in treatment depending on how your employment is terminated. If you voluntarily terminate your employment with the employer, then it is your choice and you can consider the noncompete as one more factor in your decision. However, if you are fired, you will need to seek other employment and perhaps you should be able to seek employment at a hospital covered by the noncompete. Alternatively, if your employment is terminated and your employer wishes you not to compete, maybe the employer should continue your salary during the period of the noncompete. Asking for this type of provision may be helpful even if it is refused.

Covenants not to compete must be supported by consideration; that is, your promise not to compete must be matched by something of value given you by the employer. If the consideration for the covenant not to compete is your continued employment, courts have disagreed as to whether continued employment is sufficient consideration. By asking, even unsuccessfully, for additional consideration in the form of salary during the period that you are prohibited from competing, you *may* improve your ability to claim that this covenant was not supported by consideration.

Miscellaneous clauses

Often, covenants not to compete are accompanied by miscellaneous clauses which are also objectionable. These may include a provision in which the employee represents that the covenant will not deprive him or her of earning a living. Obviously, this stems from one of the ways in which covenants not to compete are attacked. A court may be willing to grant relief in a situation where the parties have unequal bargaining power and where one party uses this unequal power to get the other

to agree to something which could interfere with the ability to earn a living. It has always seemed one of the more ridiculous sides of the law that in the limited circumstances when a court will actually step in and grant relief, lawyers force the victim to agree that a covenant not to compete will not affect them. Obviously, a covenant not to compete does affect the employee's ability to find a job, and the representation that it does not is just one more example of the employer's misuse of superior bargaining power.

THE STARS OF TEXAS HEALTH

SHINE ONE AT A TIME

Texas Health Resources, the largest not-for-profit healthcare system in Texas, wants to help you shine. Formed by the merger of Presbyterian Healthcare System and Harris Methodist Health System, Texas Health Resources offers a universe of specialties, facilities, environments, educational programs, schedules and benefits.

At the hub of Presbyterian Healthcare System's, care-giving program is 700+ bed Presbyterian Hospital of Dallas. Begun in 1966, it has grown into a 105-acre campus that is home to three acute care facilities.

We are currently looking to fill the following positions:

★ CRNAs

Full-time and part-time obstetrical anesthesia positions with flexible self-scheduling available. Work the hours and days that meet your needs. Anesthesia care team approach with MDAs and CRNAs.

Also available: OR Anesthesia - full-time, including call from home

Requirements include:

Current Texas RN Licensure • AANA certified or certification eligible

Up to \$5,000 Bonus Available!

For immediate consideration, please send resumes to: **Presbyterian Hospital of Dallas, Karen DeLavan, Planning and Placement, 8440 Walnut Hill Lane, Suite 300, LB28, Dallas, TX 75231, 800/749-6877, 214/345-6098, FAX: 214/345-4003, E-MAIL: delavak@phscare.org**

Please visit our website at
www.phscare.org and www.hmhs.com

An Equal Opportunity/Affirmative
Action Employer. M/F/D/V.

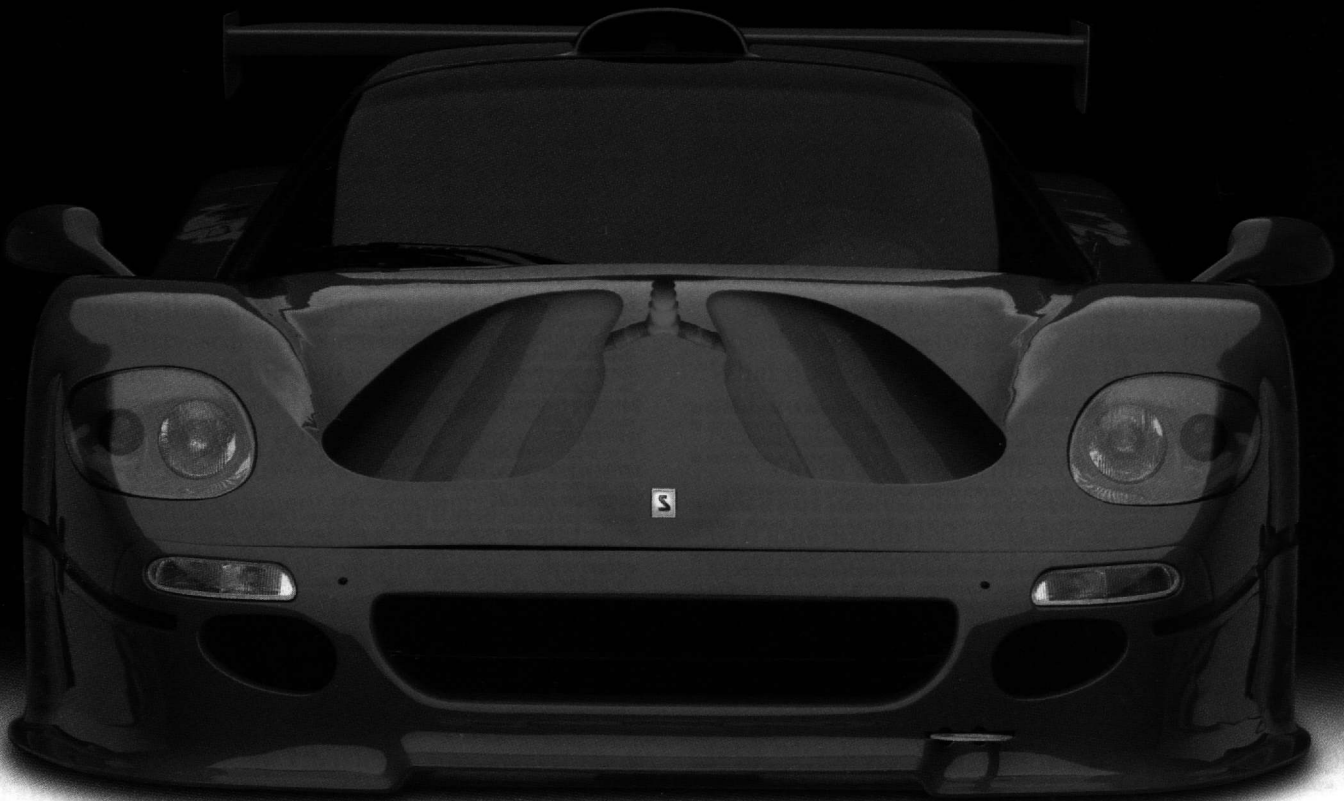


TEXAS HEALTH RESOURCES

RESPECT INTEGRITY COMPASSION EXCELLENCE DIVERSITY

**Get your anesthesia
performance on the
fast track.**

 **Suprane**[®]
desflurane, USP
THE FAST TRACK ANESTHETIC[™]



Desflurane should not be used as the sole agent for anesthetic induction in patients with coronary artery disease or patients where increases in blood pressure are undesirable. During induction in such patients, desflurane should be used with other medications, preferably intravenous opioids and hypnotics.

Desflurane is not recommended for induction of general anesthesia in infants and children because of high incidence of moderate-to-severe laryngospasm, coughing, breath-holding, secretions and oxyhemoglobin desaturation. Please see brief summary of Prescribing Information.

Suprane® (desflurane, USP)

Suprane® (desflurane, USP) Volatile liquid for Inhalation.

The following is a Brief Summary, please see complete prescribing information before prescribing.

INDICATIONS AND USAGE

SUPRANE® (desflurane, USP) is indicated as an inhalation agent for induction and/or maintenance of anesthesia for inpatient and outpatient surgery in adults (see PRECAUTIONS).

SUPRANE® (desflurane, USP) is not recommended for induction of anesthesia in pediatric patients because of a high incidence of moderate to severe upper airway adverse events (see WARNINGS). After induction of anesthesia with agents other than SUPRANE®, and tracheal intubation, SUPRANE® is indicated for maintenance of anesthesia in infants and children.

CONTRAINDICATIONS

SUPRANE® (desflurane, USP) should not be used in patients with a known or suspected genetic susceptibility to malignant hyperthermia.

WARNINGS

Pediatric Use: SUPRANE® (desflurane, USP) is not recommended for induction of general anesthesia via mask in infants or children because of the high incidence of moderate to severe laryngospasm in 50% of patients, coughing 72%, breathholding 68%, increase in secretions 21% and oxyhemoglobin desaturation 26%.

SUPRANE® (desflurane, USP) should be administered only by persons trained in the administration of general anesthesia, using a vaporizer specifically designed and designated for use with desflurane. Facilities for maintenance of a patent airway, artificial ventilation, oxygen enrichment, and circulatory resuscitation must be immediately available. Hypotension and respiratory depression increase as anesthesia is deepened.

SUPRANE® (desflurane, USP) may present an increased risk in patients with a known sensitivity to halogenated anesthetic agents.

PRECAUTIONS

During the maintenance of anesthesia, increasing concentrations of SUPRANE® (desflurane, USP) produce dose-dependent decreases in blood pressure. Excessive decreases in blood pressure may be related to depth of anesthesia and in such instances may be corrected by decreasing the inspired concentration of SUPRANE®.

Concentrations of desflurane exceeding 1 MAC may increase heart rate. Thus an increased heart rate may not be a sign of inadequate anesthesia.

In patients with intracranial space occupying lesions, SUPRANE® (desflurane, USP) should be administered at 0.8 MAC or less, in conjunction with a barbiturate induction and hyperventilation (hypocapnia). Appropriate measures should be taken to maintain cerebral perfusion pressure (see CLINICAL STUDIES, Neurosurgery).

In patients with coronary artery disease, maintenance of normal hemodynamics is important to the avoidance of myocardial ischemia. Desflurane should not be used as the sole agent for anesthetic induction in patients with coronary artery disease or patients where increases in heart rate or blood pressure are undesirable. It should be used with other medications, preferably intravenous opioids and hypnotics (see CLINICAL STUDIES, Cardiovascular Surgery).

Inspired concentrations of SUPRANE® (desflurane, USP) greater than 12% have been safely administered to patients, particularly during induction of anesthesia. Such concentrations will proportionately dilute the concentration of oxygen; therefore, maintenance of an adequate concentration of oxygen may require a reduction of nitrous oxide or air if these gases are used concurrently.

The recovery from general anesthesia should be assessed carefully before patients are discharged from the post anesthetic care unit (PACU).

SUPRANE® (desflurane, USP), like some other inhalational anesthetics, can react with desiccated carbon dioxide (CO₂) absorbents to produce carbon monoxide which may result in elevated levels of carboxyhemoglobin in some patients. Case reports suggest that barium hydroxide lime and soda lime become desiccated when fresh gases are passed through the CO₂ absorber canister at high flow rates over many hours or days. When a clinician suspects that CO₂ absorbent may be desiccated, it should be replaced before the administration of SUPRANE® (desflurane, USP).

Drug Interactions

No clinically significant adverse interactions with commonly used preanesthetic drugs, or drugs used during anesthesia (muscle relaxants, intravenous agents, and local anesthetic agents) were reported in clinical trials. The effect of desflurane on the disposition of other drugs has not been determined.

Like isoflurane, desflurane does not predispose to premature ventricular arrhythmias in the presence of exogenously infused epinephrine in swine.

BENZODIAZEPINES AND OPIOIDS (MAC Reduction):

Benzodiazepines (midazolam 25-50 µg/kg) decrease the MAC of desflurane by 16% as do the opioids (fentanyl 3-6 µg/kg) by 50% (see DOSAGE AND ADMINISTRATION).

NEUROMUSCULAR BLOCKING AGENTS:

Anesthetic concentrations of desflurane at equilibrium (administered for 15 or more minutes before testing) reduced the ED₅₀ of succinylcholine by approximately 30% and that of atracurium and pancuronium by approximately 50% compared to N₂O/opioid anesthesia. The effect of desflurane on duration of nondepolarizing neuromuscular blockade has not been studied.

DOSAGE OF MUSCLE RELAXANT CAUSING 95% DEPRESSION IN NEUROMUSCULAR BLOCKADE

Desflurane Concentration	Pancuronium	Atracurium	Succinylcholine
0.65 MAC 60% N ₂ O/O ₂	26	123	-
1.25 MAC 60% N ₂ O/O ₂	18	91	-
1.25 MAC O ₂	22	120	362

Dosage reduction of neuromuscular blocking agents during induction of anesthesia may result in delayed onset of conditions suitable for endotracheal intubation or inadequate muscle relaxation, because potentiation of neuromuscular blocking agents requires equilibration of muscle with the delivered partial pressure of desflurane.

Among nondepolarizing drugs, only pancuronium and atracurium interactions have been studied. In the absence of specific guidelines:

- For endotracheal intubation, do not reduce the dose of nondepolarizing muscle relaxants or succinylcholine.
- During maintenance of anesthesia, the dose of nondepolarizing muscle relaxants is likely to be reduced compared to that during N₂O/opioid anesthesia. Administration of supplemental doses of muscle relaxants should be guided by the response to nerve stimulation.

Malignant Hyperthermia: In susceptible individuals, potent inhalation anesthetic agents may trigger a skeletal muscle hypermetabolic state leading to high oxygen demand and the clinical syndrome known as malignant hyperthermia. In genetically susceptible pigs, desflurane induced malignant hyperthermia. The clinical syndrome is signalled by hypercapnia, and may include muscle rigidity, tachycardia, tachypnea, cyanosis, arrhythmias, and/or unstable blood pressure. Some of these nonspecific signs may also appear during light anesthesia: acute hypoxia, hypercapnia, and hypovolemia.

Treatment of malignant hyperthermia includes discontinuation of triggering agents, administration of intravenous dantrolene sodium, and application of supportive therapy. (Consult prescribing information for dantrolene sodium intravenous for additional information on patient management.) Renal failure may appear later, and urine flow should be monitored and sustained if possible.

Renal or Hepatic Insufficiency

Nine patients receiving SUPRANE® (desflurane, USP) (N=9) were compared to 9 patients receiving isoflurane, all with chronic renal insufficiency (serum creatinine 1.5-6.9 mg/dL). No differences in hematological or biochemical tests, including renal function evaluation, were seen between the two groups. Similarly, no differences were found in a comparison of patients receiving either SUPRANE® (desflurane, USP) (N=28) or isoflurane (N=30) undergoing renal transplant.

Eight patients receiving SUPRANE® (desflurane, USP) were compared to six patients receiving isoflurane, all with chronic hepatic disease (viral hepatitis, alcoholic hepatitis, or cirrhosis). No differences in hematological or biochemical tests, including hepatic enzymes and hepatic function evaluation, were seen.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Animal carcinogenicity studies have not been performed with SUPRANE® (desflurane, USP). *In vitro* and *in vivo* genotoxicity studies did not demonstrate mutagenicity or chromosomal damage by SUPRANE®. Tests for genotoxicity included the Ames mutation assay, the metaphase analysis of human lymphocytes, and the mouse micronucleus assay. Fertility was not affected after 1 MAC-Hour per day exposure (cumulative 63 and 14 MAC-Hours for males and females, respectively). At higher doses, parental toxicity (mortalities and reduced weight gain) was observed which could affect fertility.

Teratogenic Effects: No teratogenic effect was observed at approximately 10 and 13 cumulative MAC-Hour exposures at 1 MAC-Hour per day during organogenesis in rats or rabbits. At higher doses increased incidences of post-implantation loss and maternal toxicity were observed. However, at 10 MAC-Hours cumulative exposure in rats, about 6% decrease in the weight of male pups was observed at preterm caesarean delivery.

Pregnancy Category B: There are no adequate and well-controlled studies in pregnant women. SUPRANE® (desflurane, USP) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Rats exposed to desflurane at 1 MAC-hour per day from gestation day 15 to lactation day 21, did not show signs of dystocia. Body weight of pups delivered by these dams at birth and during lactation were comparable to that of control pups. No treatment related behavioral changes were reported in these pups during lactation.

Labor and Delivery: The safety of desflurane during labor or delivery has not been demonstrated.

Nursing Mothers: The concentrations of desflurane in milk are probably of no clinical importance 24 hours after anesthesia. Because of rapid washout, desflurane concentrations in milk are predicted to be below those found with other volatile potent anesthetics.

Geriatric Use: The average MAC for SUPRANE® (desflurane, USP) in a 70 year old patient is two-thirds the MAC for a 20 year old patient (see DOSAGE AND ADMINISTRATION).

Pediatric Use: SUPRANE® (desflurane, USP) is not recommended for induction of general anesthesia via mask in infants or children because of the high incidence of moderate to severe laryngospasm, coughing, breathholding and increase in secretions and oxyhemoglobin desaturation (see WARNINGS).

Neurosurgical Use: SUPRANE® (desflurane, USP) may produce a dose-dependent increase in cerebrospinal fluid pressure (CSFP) when administered to patients with intracranial space occupying lesions. Desflurane should be administered at 0.8 MAC or less, and in conjunction with a barbiturate induction and hyperventilation (hypocapnia) until cerebral decompression in patients with known or suspected increases in CSFP. Appropriate attention must be paid to maintain cerebral perfusion pressure (see CLINICAL STUDIES, Neurosurgery).

ADVERSE REACTIONS

Adverse event information is derived from controlled clinical trials, the majority of which were conducted in the United States. The studies were conducted using a variety of premedications, other anesthetics, and surgical procedures of varying length. Most adverse events reported were mild and transient, and may reflect the surgical procedures, patient characteristics (including disease) and/or medications administered.

Of the 1,843 patients exposed to SUPRANE® (desflurane, USP) in clinical trials, 370 adults and 152 children were induced with desflurane alone and 687 patients were maintained principally with desflurane. The frequencies given reflect the percent of patients with the event. Each patient was counted once for each type of adverse event. They are presented in alphabetical order according to body system.

PROBABLY CAUSALLY RELATED: Incidence greater than 1%.

Induction (use as a mask inhalation agent):

Adult patients (N=370): Coughing 34%, breathholding 30%, apnea 15%, increased secretions*, laryngospasm*, oxyhemoglobin desaturation (SpO₂ < 90%)*, pharyngitis*.
Pediatric patients (N=152): Coughing 72%, breathholding 68%, laryngospasm 50%, oxyhemoglobin desaturation (SpO₂ < 90%) 26%, increased secretions 21%, bronchospasm*.
 (See WARNINGS)

Maintenance or Recovery

Adult and pediatric patients (N=687):

Body as a Whole: Headache.
Cardiovascular: Bradycardia, hypertension, nodal arrhythmia, tachycardia.
Digestive: Nausea 27%, vomiting 16%.
Nervous system: Increased salivation.
Respiratory: Apnea*, breathholding, cough increased*, laryngospasm*, pharyngitis.
Special Senses: Conjunctivitis (conjunctival hyperemia)

* Incidence of events: 3% - 10%

PROBABLY CAUSALLY RELATED: Incidence less than 1% and reported in 3 or more patients, regardless of severity (N=1,843)

Cardiovascular: Arrhythmia, bigeminy, abnormal electrocardiogram myocardial ischemia, vasodilation.
Nervous System: Agitation, dizziness.
Respiratory: Asthma, dyspnea, hypoxia.

CAUSAL RELATIONSHIP UNKNOWN: Incidence less than 1% and reported in 3 or more patients, regardless of severity (N=1,843)

Body as a Whole: Fever.
Cardiovascular: Hemorrhage, myocardial infarct.
Metabolic and Nutrition: Increased creatinine phosphokinase.
Musculoskeletal System: Myalgia.
Skin and Appendages: Pruritus.

See PRECAUTIONS for information regarding pediatric use and malignant hyperthermia.

Laboratory Findings: Transient elevations in glucose and white blood cell count may occur as with use of other anesthetic agents.

OVERDOSAGE

In the event of overdosage, or suspected overdosage, take the following actions: discontinue administration of SUPRANE® (desflurane, USP), maintain a patent airway, initiate assisted or controlled ventilation with oxygen, and maintain adequate cardiovascular function.

SAFETY AND HANDLING

Occupational Caution: There is no specific work exposure limit established for SUPRANE® (desflurane, USP). However, the National Institute for Occupational Safety and Health Administration has recommended an 8-hr, time-weighted average limit of 2 ppm for halogenated anesthetic agents in general (0.5 ppm when coupled with exposure to N₂O).

The predicted effects of acute overexposure by inhalation of SUPRANE® (desflurane, USP) include headache, dizziness or (in extreme cases) unconsciousness.

There are no documented adverse effects of chronic exposure to halogenated anesthetic vapors (Waste Anesthetic Gases or WAGs) in the workplace. Although results of some epidemiological studies suggest a link between exposure to halogenated anesthetics and increased health problems (particularly spontaneous abortion), the relationship is not conclusive. Since exposure to WAGs is one possible factor in the findings for these studies, operating room personnel, and pregnant women in particular, should minimize exposure. Precautions include adequate general ventilation in the operating room, the use of a well-designed and well-maintained scavenging system, work practices to minimize leaks and spills while the anesthetic agent is in use, and routine equipment maintenance to minimize leaks.

Manufactured by:

Baxter Baxter Healthcare Corporation
Deerfield, IL 60015