Federation of Specialty Nursing Organizations and the American Nurses’ Association seek ways to reach all nurses

The importance of getting professional information to approximately 750,000 registered nurses who are not members of a nursing organization was emphasized during the ninth meeting of the Federation of Specialty Nursing Organizations and the American Nurses’ Association in New York’s Waldorf Astoria Hotel on Friday and Saturday, June 25 and 26.

Current specialty group and ANA memberships were reported at around 250,000. Eighteen specialty nursing organizations, including the American Association of Nurse Anesthetists, were represented at the meeting. Also present was the International Association for Enterostomal Therapy, which was admitted to membership Friday morning.

As a result of a position paper on “Prevention of Fragmentation of Patient Care” submitted by the American Association of Critical Care Nurses, a committee was appointed to prepare a similar position paper on the subject in relation to the entire profession for all groups to consider.

Among other subjects on the agenda were standard definitions of nursing titles, representation to the American Blood Commission, accreditation of continuing education programs, certification and credentialing.

The American Association of Industrial Nurses (AAIN) was host for the two-day meeting. Sue A. Bill, president, AAIN, presided at the sessions.

Representing the AANA were Nancy A. Fevold, CRNA, AANA acting executive director, and Dolores E. Biggins, CRNA, AANA president.

Next meeting of the nursing organizations will be held in Washington, D.C., Jan. 21 and 22. Host group will be the National Educational Association Department of School Nurses.

Question positive effects of National Health Insurance

In a recent study of the major National Health Insurance bills before the U.S. Congress, it was concluded that “none of them would make more than marginal improvements in the nation’s health.”

The study, reported Medical Economics, was conducted by the Institute for Contemporary Studies, a research foundation.

From an economic standpoint, the study concluded that National Health Insurance would be even further problematic. It contended that even the moderate Long-Ribicoff bill would cause medical fees to increase considerably.

President Ford signs into law the medical device amendments of 1976

President Ford recently signed into law S.510, dealing with medical device legislation. The law is highlighted as eliminating the deficiencies that accorded the Food and Drug Administration “horse and buggy” authority to handle “laser age” problems, stated Washington Developments.

The new legislation sets up federal government controls to ensure the safety and effectiveness of medical devices for human use. The measure spells out categories for devices to be subject to controls, outlines performance standards, and lists requirements for such procedures as premarket approval, general controls, and public release of data on disapproved devices.

President Ford commented that this legislation is important “not only in what it will do to protect the consumer,” but, “it is also important as a symbol for the kind of regulation that I feel is most appropriate to government.”

(continued on page 369)
Nursing concerns discussed at
American Nurses' Association
1976 Convention

Legislation, nursing manpower, continuing education, collective bargaining, ethnocentrism, certification, and clinical concerns were some of the program topics covered at the American Nurses' Association 1976 Convention. The convention, which was built around the theme, "A Past to Remember/A Future to Shape," was held in Atlantic City from June 6-11.

Among the news-making announcements was the introduction of a bill to assure registered nurse participation in PSRO activities.

Rep. Martha Keys introduced a bill into the U.S. Congress that would require at least 30% RN membership on local Professional Standards Review Organizations' Review Boards, and the designation by each state nurses' association of two professional registered nurses to be added to state PSRO Councils.

At the national level where there are currently 11 physicians serving on the National PSRO Council, three professional RN's would be added.

In other news of the convention, Anne Zimmerman, RN, of Chicago was elected president of the ANA, which now numbers some 200,000 members.

Seek change in Medicare regulatory requirements for rural hospitals

The American Hospital Association reported that legislation is being introduced to amend the Medicare and Medicaid provisions of the Social Security Act to establish a separate classification for rural health facilities with no more than 50 beds.

The reason for the proposed legislation is that stringent Medicare regulatory requirements, especially those relating to hospital staffing and personnel and health and safety, are making it difficult for these smaller hospitals to survive.
A "quick recovery" anesthetic for short surgical procedures

Ethrane® (enflurane) fulfills your anesthetic requirements for short surgical procedures.

Fast Induction, Rapid Recovery. The low blood/gas partition coefficient of ETHRANE (1.91 at 37°C) assures rapid patient induction with minimal excitation. Its mild, pleasant odor is highly acceptable and ETHRANE does not stimulate increased salivation or affect bronchomotor tone.1 Pharyngeal and laryngeal reflexes can be quickly and easily obtunded. Following anesthesia, because of its low blood solubility, ETHRANE is promptly eliminated at the lungs, permitting rapid emergence and recovery.7

Stable Cardiac Rhythm. Cardiac rhythm usually remains normal during ETHRANE anesthesia and is not altered even with elevations in arterial carbon dioxide.3 Although nodal or atrial arrhythmias occasionally appear, ventricular extrasystoles are rare. Heart rate is sustained at preanesthetic levels. Bradycardia or tachycardia do not normally occur. Blood pressure tends to be reduced with induction, but this effect is reversed with surgical stimulation.4

Excellent Muscle Relaxation. At clinical concentrations, ETHRANE usually provides muscle relaxation sufficient for lower abdominal procedures. In addition, relaxation is often adequate for procedures of the upper abdomen. If greater relaxation is required, its potential of nondepolarizing relaxants reduces the dosage of such adjunctive neuromuscular blocking agents.4

Few Anesthetic Aftereffects. Following cessation of anesthesia with ETHRANE, recovery is rapid, uneventful, and complete. Postoperative return of adequate pulmonary ventilation is rapid.1 Nausea, vomiting, and delirium are rare. Usually there is an early return of lucidity, desire for fluids, and generally a feeling of well-being.13

WARNING: Motor activity exemplified by movement of various muscle groups and/or seizures may be encountered with deep levels of ETHRANE (enflurane) anesthesia. For additional warnings, contraindications, and precautions, see following page.

Films Available for Medical Education. As a service to the anesthesia profession, Ohio Medical Products has available, without charge, motion pictures for use in continuing medical education. Topics include such areas as "Management of Ambulatory Surgical Procedures" and "The Use of ETHRANE." To arrange for a personal or group showing, contact your OHIO Anesthetic Representative, or write to our Communications Department in Madison, Wisconsin.

Ethrane® (enflurane)
Versatile in Concept—Versatile in Performance

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See following page for full disclosure
**Enflurane® (enflurane) Versatile in concept … Versatile in performance.**

**CAUTION: Federal Law Prohibits Dispensing without Prescription**

Described by some as a truly versatile anesthetic agent, Enflurane is a potent, nonflammable anesthetic that is 2-chloro-1,1,2-trifluoroethyl difluoromethyl ether, and its structural formula is:

\[
\text{H} - \text{C} = \text{O} - \text{F} - \text{F}
\]

Some physical constants of the compound are:

- Molecular weight: 184.5
- Boiling point: 760 mm Hg at 56.5°C
- Refractive index: 1.0362 at 20°C
- Specific gravity: 2.5
- Vapor pressure in mm Hg:
  - 20°C: 174.5
  - 25°C: 217.7
  - 36°C: 345.2

\*Equation for calculation of enflurane vapor pressures

\[ \text{P} = \frac{\text{A} + \text{B}}{\text{T} + \text{C}} \]

\[ \text{T} = \text{C} + 273.16 \]

Partition coefficients @ 37°C:

- Water-gas: 2.5
- Blood-gas: 1.62
- Oil-gas: 0.81
- Methanol solution: 95.6

Partition coefficients @ 23°C:

- Water-gas: 1.8
- Blood-gas: 1.65
- Oil-gas: 0.85
- Methanol solution: 96.8

Enflurane is a clear, colorless, stable liquid without added chemical stabilizers. Enflurane has a mild, sweet odor. Storage of large quantities of enflurane in clear, colorless glass for a five-year period, as well as, exposure for 30 minutes to clear, colorless glass for 2 and 1/2 min at 2 mm Hg and 113ºF, and for 3, 6, and 9 months consumed none of the flammable gases, indicating a strong base stability. Enflurane does not decompose in contact with soda lime. Enflurane does not attack aluminum, tin, brass, iron, copper or other materials.

**Actions:** Enflurane (enflurane) is an inhalation anesthetic. Induction and recovery from anesthesia with Enflurane are rapid. Enflurane does not appear to stimulate excess salivation or tracheobronchial secretions, or affect bronchomotor tone. Pharyngeal and laryngeal reflexes are readily obliterated. The level of anesthesia changes rapidly with Enflurane. Enflurane reduces the depth of anesthesia increases. Enflurane provokes a sigh response reminiscent of that seen with diethyl ether.

There is a decrease in blood pressure with induction of anesthesia, followed by a return to near normal with surgical stimulation. After two to three depths of anesthesia produce corresponding increases in hypotension. Heart rate remains relatively constant without significant bradycardia. Electrocardiographic monitoring of recordings indicate that cardiac rhythm remains stable. Elevation of the carbon dioxide tension during anesthesia will not alter cardiac rhythm. Enflurane sensitizes the myocardial conduction system to sympto- pathies and can produce paroxysmal arrhythmias. Comparable information in man is not available.

Muscle relaxation is adequate for intra-abdominal operation at normal levels of anesthesia. Should further relaxation be necessary, minimal doses of muscle relaxants may be employed. The commonly used muscle relaxants are compatible with Enflurane. The use of curarizing muscle relaxants is markedly potentiated, therefore Enflurane does not reverse the direct effect of Enflurane.

Biotransformation of Enflurane (enflurane) in man results in no levels of serum fluoride ions averaging 15 mmol/L. These levels are well below the 50 mmol/L seen to produce renal damage in normal subjects, however, it is possible that these levels could result in damage to individual patients with severely impaired renal function or those undergoing renal transplantation.

**Indications:** Enflurane (enflurane) may be used for induction and maintenance of general anesthesia. Adequate data have not been developed to evaluate its application in obstetrical anesthesia.

**Contraindications:** Seizure disorders (see **WARNINGS**). Known sensitivity to Enflurane (enflurane) or other halogenated anesthetics.

**Warnings:** Increasing depth of anesthesia with Enflurane (enflurane) produces a change in the electroencephalographic characteristic by high voltage, fast frequency, progressing through high veeveeees complexes, alternating with periods of electrical silence, to frank slow wave activity. The latter may or may not be associated with motor movement. Motor activity, when encountered, generally consists of twitching or jerks of various muscle groups. It is self-limiting and can be terminated by lowering the anesthetic concentration. This electroencephalographic pattern associated with deep anesthesia is exacerbated by hyperventilation producing low arterial carbon dioxide tension. The pattern serves as a warning that deep level of anesthesia is excessive. Cerebral blood flow and metabolism studies in normal volunteers during anesthesia show a decrease in cerebral blood flow and recovery appears to be uncomplicated.

Since levels of anesthesia may be altered easily and rapidly, only calibrated vaporizers which measure output with reasonable accuracy should be used. Hypotension and respiratory exchange can serve as a guide to anesthesia depth. With deep levels of anesthesia, more marked hypotension and respiratory depression are encountered.

The action of nondepolarizing relaxants is augmented by Enflurane (enflurane) less than the usual amounts of these drugs should be used. The synergistic action from the myoneural effect of these relaxants is greater in the presence of Enflurane than for other commonly used anesthetics.

The safety of the use of enflurane topically and subcutaneously has not been established.

**Usage in Pregnancy:** Safety in pregnancy has not been established. Reproduction studies have been performed in rats and rabbits, and there is no evidence of harm to the animal fetus. The relevance of these studies to the human is not known. Since there is no adequate experience in pregnant women who have received the drug, safety in pregnancy has not been established.

**Precautions:** Bismuthsulfate (BSP) retention is modally elevated postoperatively in some cases. There is some elevation of glucose and white blood count intraoperatively. Glucose retention should be considered in diabetic patients. Enflurane (enflurane) should be used with caution in patients who are on medical or drug history could be precipitated more metabolically significant than it is for preoperative anesthetic production. Drug use. As with other general anesthetics and other muscle relaxants, the use of Enflurane has been observed with the use of Enflurane.

**Adverse reactions:**

1. Motor activity exemplified by movement of various muscle groups/or/seizures may be encountered while under anesthetic. Motor activity, when encountered, generally consists of twitching or jerks of various muscle groups. It is self-limiting and can be terminated by lowering the anesthetic concentration.

2. Hypotension and marked hypotension and respiratory depression are encountered.

3. Arhythmias, shivering, nausea, and vomiting have been reported. 4. Elevated white blood count has been observed.

**Dosage and administration:** The concentration of Enflurane (enflurane) being delivered should be known. This may be accomplished by using:

a) vaporizers calibrated specifically for Enflurane

b) vaporizers from which delivered flow can easily and readily be calculated. Maintenance concentrations generally should not exceed 3%. Premedication should be selected accordingly. Individual patient, taking into account that anesthetics are weakly stimulated by Enflurane and the heart rate remains constant. The use of anticholinergic drugs is a matter of choice.

**Induction:** Induction may be achieved using Enflurane alone or in combination with other commonly used anesthetics. Under these conditions some excitement may be encountered. If excitement is to be avoided, a hypoxic base of a short-acting barbiturate should be used to induce unconsciousness, followed by the Enflurane mixture. In general, inspired concentrations of 3.5-4.5% Enflurane produces a continuous concentration of anesthesia in 7-10 minutes.

**Maintenance:** Surgical levels of anesthesia may be attained with 1-3.0% concentration. Inhaled anesthetics were also used when supplemental doses of muscle relaxants may be required. The administration of carbon dioxide in arterial blood in the presence of higher Enflurane concentrations is preferred to hyperventilation in order to minimize carbon dioxide tension. The pattern serves as a warning that deep level of anesthesia is excessive. Cerebral blood flow and metabolism studies in normal volunteers during anesthesia show a decrease in cerebral blood flow and recovery appears to be uncomplicated.

Since levels of anesthesia may be altered easily and rapidly, only calibrated vaporizers which measure output with reasonable accuracy should be used. Hypotension and respiratory exchange can serve as a guide to anesthesia depth. With deep levels of anesthesia, more marked hypotension and respiratory depression are encountered.

The action of nondepolarizing relaxants is augmented by Enflurane (enflurane) less than the usual amounts of these drugs should be used. The synergistic action from the myoneural effect of these relaxants is greater in the presence of Enflurane than for other commonly used anesthetics.

The safety of the use of enflurane topically and subcutaneously has not been established.

**Overdosage:** In the event of overdosage, what may appear to be avoided, a hypnotic dose of a short-acting barbiturate should be used to induce unconsciousness, followed by the Enflurane mixture. In general, inspired concentrations of 3.5-4.5% Enflurane produces a continuous concentration of anesthesia in 7-10 minutes.

Stop drug administration, establish that the airway is clear and initiate assisted or controlled ventilation with pure oxygen as circumstances dictate.

**Administration equipment:** Enflurane (enflurane) may be administered from a flow-through type vaporizer manufactured and specifically calibrated for Enflurane. Vaporizers which deliver saturated vapor at room temperature or other similarly calibrated for Enflurane may be used.

Enflurane contains no stabilizer. Nothing is required to be added to the vaporizer or for affect the operation characteristics of the vaporizer.

**Packaging:** Enflurane (enflurane) is packaged in 125 and 250 ml amber bottles. No additives or stabilizers are present.

**References:**


Selected cases for Ketalar® (ketamine HCl injection)
(and a caution)

There are certain situations where the advantages of Ketalar suggest its serious consideration.

Four such hypothetical situations are detailed here. A fifth hypothetical case illustrates a situation in which Ketalar probably should be used only with caution.

Geriatric surgical procedure
Ketalar offers advantages in minor rectal surgery on elderly patients. When properly administered, Ketalar usually does not depress the patient’s blood pressure or pulse rate, which can be a distinct advantage with any patient who is likely to develop hypotension. Further, emergence reactions normally are not a problem with patients in the older age group (over 65).

Severely burned patients
Patients with severe burns—and particularly children—are often excellent cases for Ketalar. In children, Ketalar offers rapid surgical anesthesia (generally within three to four minutes) at a range of 9 to 13 mg/kg, with the effect lasting from 12 to 25 minutes (the time intervals are for IM, not IV). Intramuscular administration avoids the possible difficulty in locating the vein in burn patients (particularly helpful in children where the veins are small). IM administration is also convenient and effective for repeated short-term anesthesia for such procedures as changing burn dressings, and skin grafts.
Manipulative diagnostic procedure
Ketalar facilitates diagnostic procedures in which the patient must be moved freely, and in which the maintenance of unaided respiration is essential. The pneumoencephalogram is an example. Once anesthesia is established, the patient can be transferred from a supine to an upright, supported position with ease since Ketalar maintains adequate unaided respiration, and there is minimal relaxation of the skeletal muscles.

Emergency room treatment
A good case for Ketalar can be made for use in accident victims with unknown medical histories brought to the emergency room. In the absence of positive medical history, Ketalar can be a useful agent because of its wide margin of safety. Consideration should be given to the effects of a significant increase in blood pressure, hypersensitivity to the drug, and an elevation in cerebrospinal fluid pressure. Ketalar also provides the benefit of rapid onset, and decreases the chance of aspiration because of active laryngeal-pharyngeal reflexes.

A caution:
Caution should be exercised when administering Ketalar to patients who are known to be alcoholics or who are acutely alcohol-intoxicated as such patients may be prone to untoward reactions.

Please see following page for brief summary of prescribing information.
Brief summary of prescribing information.

**SPECIAL NOTE**

Emotional reactions have occurred in approximately 12% of patients. The psychological manifestations vary in severity between pleasant, dreamlike states to hallucinations and emergence delirium. In some cases, these states have been accompanied by confusion, excitement, and irrational behavior. Such patients recall an unpleasant experience. The duration ordinarily lasts no more than a few hours; in a few cases, however, recurrences have taken place up to 24 hours postoperatively. No residual psychological effects are known to have resulted from use of Ketalar.

The incidence of these emergence phenomena is least in the young (15 years of age or less) and elderly (over 65 years of age) patient, so they are less frequent when the drug is given intramuscularly.

These reactions may be reduced if venous or arterial cannulation is possible. Visual stimulation of the patient is minimized during the recovery period. This does not preclude the monitoring of vital signs. In addition, the use of a smooth intravenous catheter (such as a no. 18 gauge) prior to administration of acting or ultrashort-acting barbiturate may be required to terminate the emergence reaction. The incidence of emergence reactions is reduced as experience with the drug is gained.

When Ketalar is used on an outpatient basis, the patient should not be permitted to recover from anesthesia complete and then should be accompanied by a responsible adult.

**INDICATIONS**

Ketalar (ketamine HCl injection) is recommended:

1. as the sole anesthetic agent for diagnostic and surgical procedures that do not require skeletal muscle relaxation. Ketalar is best suited for short procedures but it can be used, with additional doses, for longer procedures;
2. for the induction of anesthesia prior to the administration of other general anesthetic agents;
3. to supplement low-potency agents, such as nitrous oxide.

**CONTRAINDICATIONS**

Ketamine hydrochloride is contraindicated in those in whom a significant elevation of blood pressure would constitute a serious hazard and those who have shown hypersensitivity to the drug.

**WARNINGS**

1. Ketalar should be used by or under the direction of physicians experienced in administering general anesthetics and in maintenance of an airway and in the control of respiration.
2. Cardiac function should be continually monitored during the procedure in patients found to have hypertension or cardiac decompensation.
3. Barbiturates and Ketalar, when chemically incompatible because of precipitate formation, should not be injected from the same syringe.
4. Prolonged recovery time may occur if barbiturates and/or narcotics are used concurrently with Ketalar.
5. Postoperative confusional states may occur during the recovery period.
6. Respiratory depression may occur with use of Ketalar and should be closely monitored. For information on Ketalar, in which case supportive ventilation should be employed. Mechanical support of respiration is preferred to administration of analeptics.

**Usage in Pregnancy**

Since the safe use in pregnancy, including obstetrics (either vaginal or abdominal delivery), has not been established, such use is not recommended.

**PRECAUTIONS**

1. Because pharyngeal and laryngeal reflexes are usually diminished by ketamine HCl injection) should not be used alone in surgery or diagnostic procedures of the pharynx, larynx, or bronchi. If such reflexes are stimulated during the pharynx should be avoided, whenever possible, if Ketalar is used alone. Muscle relaxants, with proper attention to respiration, may be required in both of these instances.
2. Reassurance equipment should be ready for use.
3. The incidence of emergence reactions may be reduced if verbal and tactile stimulation of the patient is minimized during the recovery period. This does not preclude the monitoring of vital signs (see Special Note).
4. If the intravenous dose should be administered over a period of 60 seconds. More rapid administration may result in respiratory depression or apnea and enhanced pressor response.
5. In surgical procedures involving visceral pain pathways, an agent which obtunds pain should be supplemented with an agent which obviates visceral pain.
6. Use with caution in the chronic alcoholic and the acutely alcohol-intoxicated patient.
7. An increase in cerebrospinal fluid pressure has been reported following administration of ketamine hydrochloride. Use with extreme caution in patients with preanesthetic elevated cerebrospinal fluid pressure.

**ADVERSE REACTIONS**

Cardiovascular:

Blood pressure and pulse rates are frequently altered following administration of Ketalar. However, hypotension and bradycardia have been observed. Arhythmia has also occurred.

Respiration:

Although respiration is frequently stimulated, severe depression of respiration or apnea may occur following rapid intravenous administration of high doses of Ketalar (ketamine HCl injection). Laryngospasms and other forms of airway obstruction have occurred during Ketalar anesthesia.

Eye:

 Diplopia and nystagmus have been noted following Ketalar administration. It also may cause a slight elevation in intraocular pressure.

Psychological: (See Special Note).

Neurological: In some patients, enhanced skeletal muscle relaxation manifested by tonic and clonic movements sometimes resembling seizures (see Dosage and Administration).

Gastrointestinal:

Anorexia, nausea and vomiting have been observed; however this is not usually severe and allows the great majority of patients to take liquids by mouth shortly after regaining consciousness (see Dosage and Administration).

General: Local pain and exanthem at the injection site have infrequently been reported. Transient erythema and/or morbilliform rash have also been reported.

**DOSAGE AND ADMINISTRATION**

Preparative Preparations:

1. While vials are supplied for intravenous use only, Ketalar administration, airway protection and some form of airway obstruction should be established prior to and during the administration of Ketalar.

2. Atropine, scopolamine, or other drying agents should be injected from the same syringe.

3. Since the safe use in pregnancy, including obstetrics (either vaginal or abdominal delivery), has not been established, such use is not recommended.

4. As with other general anesthetic agents, the individual response to Ketalar (ketamine HCl injection) is somewhat varied depending on the dose, route of administration, and condition of the patient, so that dosage recommendation cannot be absolutely fixed. The drug should be titrated against the patient's requirements.

**Onset and Duration**

Because of rapid induction following the initial intravenous injection, the patient should be in a supported position during administration.

The onset of action of Ketalar (ketamine HCl injection) is rapid, an intravenous dose of 2 mg/kg (1 mg/lb) of body weight usually produces surgical anesthesia within 30 seconds after injection, with the anesthetic effect usually lasting five to ten minutes. If a longer effect is desired, additional increments can be administered intravenously or intramuscularly to maintain anesthesia without producing significant cumulative effects. Intramuscular doses, from experience primarily in children, in a range of 9 to 13 mg/kg (4 to 6 mg/lb) usually produce surgical anesthesia within three to four minutes following injection, with the anesthetic effect usually lasting 12 to 25 minutes.

**Induction**

Intravenous Route: The initial dose of Ketalar administered intravenously may range from 1.5 to 4.5 mg/kg (0.6 to 2 mg/lb) and are not the average amount required to produce five to ten minutes of surgical anesthesia has been 2 mg/kg (1 mg/lb).

NOTE: The 100 mg/ml concentration (581-1585) of Ketalar should not be injected intravenously without proper dilution. It is recommended the drug be diluted with an equal volume of either Sterile Water for Injection, USP, Normal saline, or 5% dextrose in Water.

**Maintenance of Anesthesia**

Intravenous Route: The initial dose of Ketalar administered intramuscularly may range from 6.5 to 13 mg/kg (3 to 6 mg/lb). A dose of 10 mg/kg (5 mg/lb) will usually produce 12 to 25 minutes of surgical anesthesia.

**Dosage**

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