

Congress report

The Hague: 10th World Congress of Anaesthesiologists: Panel on Ambulatory Care

Anaesthesiologists from every continent and almost every country in the world participated in the 10th World Congress of Anaesthesiologists held 12–19 June, 1992 in The Hague, The Netherlands. One of the highlights of this enormous conference, which takes place once every 4 years, was the Panel on Ambulatory Care.

The chair of the panel was J R Nocite, from Ribeirao Preto, Brazil. The panel consisted of Jeffrey L Apfelbaum, University of Chicago; Kari T Korttila, University of Helsinki, Finland; J Raeder, Baerum, Norway; and Sujit K Pandit, University of Michigan.

In his introductory comments, Dr Nocite stated that the main objective of ambulatory care is cost containment, a particularly important consideration in developing countries. He pointed out that the United States and Canada are the leaders in the development of ambulatory surgery, where at present up to 60% of all surgeries are done as outpatient procedures.

Jeffrey L Apfelbaum presented the topic, 'Patient and Procedure Selection.' He commented that in the United States this year, for the first time, the total number of outpatient surgical cases will exceed the number of inpatient cases. He described his freestanding outpatient surgery facility (built on the ninth floor of a shopping mall in Chicago). Dr Apfelbaum pointed out that in sharp contrast to 20 years ago when a patient may have spent 3 days in the hospital for a minor operation, for that same operation today, the patient might spend as little as 1 hour in the freestanding surgery facility.

Dr Apfelbaum described another innovation in outpatient surgery, freestanding recovery room care. He noted that patients might spend up to 72 hours following complicated outpatient surgery in such facilities like the one in Fresno, California. This facility has a very high (compared to standard postoperative ward) nurse-to-patient ratio up to 1 : 5, as well as luxurious accommodation with dining arrangements.

Quoting studies by Meridy, Natoff and Wetchler, Dr Apfelbaum stated that increasing age or ASA physical status does not increase the complication rate after outpatient surgery. On the other hand, he cautioned that certain patients may not be suitable candidates for outpatient surgery (e.g. those with morbid obesity with concomitant disease, a history of acute substance abuse, susceptibility to malignant hyperthermia or those receiving monoamino oxidase inhibitors).

Moreover, patients who are either unable or unwilling should not be forced to undergo outpatient care. Infants who are born premature and are less than 45 weeks of conceptual age likewise are unsuitable for outpatient surgery. This is also

true of infants with a history of apnoeic spells, failure to thrive or symptomatic children with pulmonary dysplasia.

In addressing the question of preoperative assessment in these patients, Dr Apfelbaum emphasized the importance of screening, evaluation and preparation of these patients ahead of time to avoid a high incidence of cancellation rate on the day of surgery. He described how a hand-held computer is being used in his institution as a simple and inexpensive screening device. The patient is asked 160 simple questions that an average patient can answer in 8 minutes. The computer then summarizes the important positive findings and suggests appropriate laboratory tests.

Kari T Korttila spoke on 'Recovery and Discharge after Outpatient Surgery.' He first described three levels of recovery: early recovery or emergence from anaesthesia; intermediate recovery when the patient is ready for discharge; and late recovery when the patient recovers completely at home. His primary focus was on intermediate recovery, noting that the patients need not be 'street fit'; rather, they should be simply 'home ready' before discharge. He also noted that there are no good psychomotor or laboratory tests to assess home readiness at the bedside. He suggested that discharging patients following certain clinical criteria is reliable and safe.

Dr Korttila next discussed the important question: who should discharge the patient? He suggested that the recovery room nurse can discharge the patient safely as long as the nurse follows a set of discharge criteria approved by the anaesthesiologist. The discharge criteria should include: stable vital signs; absence of any surgical complications like bleeding; minimum nausea and vomiting; minimum postoperative pain; and the ability to ambulate, retain oral fluids and void. The criteria of being able to retain oral fluids and to void are being questioned as to whether they are really necessary. According to Dr Korttila, voiding criteria is important after spinal and epidural anaesthesia.

The factors that are known to increase discharge time are: duration of surgery, type of anaesthesia, presence of nausea and vomiting and postoperative pain. He referred to several papers that suggest propofol anaesthesia decreases discharge time not only because it is eliminated fast but also because of its ability to minimize nausea and vomiting. Desflurane, a new volatile anaesthetic with very low blood-gas solubility, has a similar ability to shorten discharge time.

Dr Korttila emphasized the importance of documentation and the importance of an escort to accompany the patient home, someone who will stay with the patient overnight. Patients should be advised against driving or operating complicated machinery within 24 hours of surgery. The common causes of unanticipated hospital admission after outpatient surgery are extensive surgery, nausea and vomiting, postoperative pain and social reasons (e.g. absence of an escort).

The next speaker, J Raeder, discussed 'Is Regional Anaesthesia Appropriate for Outpatient Surgery?' He began by noting reasons that are commonly given for regional anaesthesia being inappropriate in outpatient surgery. These include: patient safety, the patient's willingness to accept regional anaesthesia, difficulty in initiating regional anaesthesia, time taken to

initiate regional anaesthesia and fear of postspinal headache. By quoting many studies, Dr Raeder argued that none of the objections is valid. In fact, several studies of inpatients indicate that regional anaesthesia is safer than general anaesthesia because it reduces surgical stress, decreases blood loss and minimizes the incidence of deep venous thrombosis. Other studies show that if patients are properly prepared, they readily accept regional anaesthesia. In two studies that surveyed the anaesthetic preferences of practising anaesthesiologists and recovery room nurses, both groups overwhelmingly preferred regional anaesthesia over general anaesthesia for themselves.

Dr Raeder proposed that regional anaesthesia should not take longer than general anaesthesia if properly planned (i.e. initiated in the holding room). Furthermore, there is significant time saved at the end of surgery because patients are ready to be moved to the recovery room immediately after completion of surgery under regional anaesthesia, which is not the case after general anaesthesia. Several studies have also shown that discharge time after epidural anaesthesia with catheters using short-acting local anaesthetic agents is, in fact, shorter than after general anaesthesia.

Postspinal headache remains a problem in young patients undergoing outpatient surgery under spinal anaesthesia. Dr Raeder pointed out, however, that new pencil-point needles like 27-gauge Whitacre or 25-gauge Sprotte have reduced the incidence of postspinal headache to a very acceptable level even in young patients.

Dr Raeder concluded by pointing out several advantages of regional anaesthesia for outpatient surgery. They include: better blockage of nociceptive reflexes, better postoperative pain control, ability to communicate with the patient during the operation, low incidence of postoperative nausea and vomiting, and significantly lower cost.

Sujit K Pandit addressed the topic 'Complications and Quality Assurance in Ambulatory Anesthesia.' Dr Pandit pointed out that the incidence of so-called 'minor side effects' after general anaesthesia are in fact quite high and are considered as 'complications' by the patient and the attendant at home. Thus, patient education about the side effects of anaesthesia is very important. By citing several studies, Dr Pandit showed that the two most common anaesthesia-related causes of unanticipated hospital admission after outpatient surgery are intractable nausea/vomiting and unrelieved postoperative pain.

The variable incidences of postoperative nausea and vomiting can be attributed to multiple confounding factors, including patient characteristics, type of operation, usage of narcotics and type of anaesthesia. He emphasized that general measures like 'smooth and elegant' anaesthesia by an experienced anaesthesiologist and scrupulous attention to detail during and after

the operation are most effective in reducing postoperative nausea and vomiting.

Dr Pandit mentioned that widespread use of propofol anaesthesia has substantially lowered the incidence of postoperative nausea and vomiting. Nevertheless, at times, the use of a prophylactic antiemetic is needed. Among the multitude of antiemetic medications, droperidol and metoclopramide are the most commonly used in the United States. Yet, there are still raging controversies about their efficacy, appropriate dosage, time and route of administration, and side effects. Although ondansetron, a new 5 HT₃ blocker antiemetic drug, seems to be devoid of many of the side effects of droperidol, it is very expensive.

Postoperative pain control remains a significant challenge after outpatient surgery. Dr Pandit recommended an approach based on the concept of 'balanced analgesia.' This approach might include a small dose of a narcotic, a nonsteroidal anti-inflammatory agent like ketorolac, and liberal usage of local anaesthetic agents in the form of either local infiltration or regional analgesia. Pre-emptive use of analgesics is considered beneficial. There are several innovations to postoperative pain control on an ambulatory basis on the horizon; they include ambulatory patient-controlled analgesia, continuous subcutaneous infusion of analgesics, transdermal route of analgesics and home nursing care.

Dr Pandit ended his presentation by describing current methods of quality assurance in outpatient surgery centres, based on the concept of 'total quality improvement.' This is a process of evaluating the system with a continuous attempt to improve quality rather than a policing action of finding faults and taking remedial actions.

During the question-and-answer session, the panelists were asked about the current guidelines on *nulla peros* (nothing by mouth) status. All panelists agreed that change is needed in our current practice of arbitrarily ordering *nulla peros* (nothing by mouth) after midnight. Several studies have shown that for healthy ASA 1 or 2 patients (both adults and children) undergoing elective surgery, an unrestricted amount of clear liquids can be and should be given up to 3 hours before induction of anaesthesia as this may be beneficial.

Another question was asked regarding how necessary it was to develop the new expensive antiemetic drugs. Dr Pandit replied that although the incidence of nausea and vomiting is steadily declining, we still have an occasional case of intractable vomiting where a reliable rescue medication is required before the patient can be sent home.

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