

REPORT OF A SCIENTIFIC MEETING

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Report on the Central European Anesthesiology Congress September 10–14, 1991 Interlaken, Switzerland

The 22nd Congress of the Austrian, German, and Swiss Federation of Anesthetists [Zentraleuropäischer Anästhesiekongress] was held between September 10–14, 1991. This year marks the 700th and 800th anniversaries of the establishment of the Swiss State Federation and the University of Bern, respectively. Accordingly, the meeting was held in Interlaken, in central Switzerland, and was organized by the Anesthesia Department of the University of Bern (Professors D. Thomson and A. M. Zbinden). Three hundred forty papers were presented, of which about 270 were free papers and posters, selected from over 500 submissions. The rest of the papers were either invited or were part of symposia or refresher courses. The Congress also included a symposium for nurses and paramedics involved in anesthesia and emergency care.

The principal themes of the Congress, which drew approximately 1,000 participants, were: monitoring and data processing, heart and lung, trauma and intensive care, and regional anesthesia. Eight parallel sessions were conducted in three locations. In addition, there was a technical exhibit by 120 firms, many from the U.S.A. Because the Congress is the principal forum for the scientific activities of Austrian, German, and Swiss Anesthesiologists, the presentations were almost exclusively in German. Fewer than 5% of the papers were presented in English or French. However, all three languages were officially recognized. This gave authors from English-speaking countries an opportunity to actively participate in this significant meeting. Nevertheless, lack of adequate knowledge of German would limit the benefit to be gained from such participation.

A significant portion of the meeting was devoted to regional anesthesia and pain management. About one fifth of all papers were presented on these topics. Intrapleural nerve blocks received increasing attention in the symptomatic treatment of Herpes Zoster (Böhme K *et al.*, Kassel, Germany), postthoracotomy (Günnicker M *et al.*, Essen, Germany and Schwemmer U *et al.*, Nurnberg, Germany), and postcholecystectomy (Stiebeling C *et al.*, Stuttgart, Germany) pain. New unconventional and promising routes of application of local anesthetics and opioids were reported. These included the iontophoretic (Irsfeldt St *et al.*, Düsseldorf, Germany) and intraperitoneal routes for local anesthetics (Freier Y *et al.*, Frankfurt, Germany) and the intra-articular route for morphine (Stein C *et al.*, Munich, Germany). Also explored were the intrathecal and peridural routes of administration using midazolam (Tolksdorf W and Amberger M, Aachen, Germany) and clonidine (Filos KS and Goudas L, Patras, Greece). The selection of the optimal opioid analgesic for peridural and continuous intravenous analgesia was discussed on several occasions and included a panel discussion chaired by J. Bonica (Seattle, Washington, U.S.A.) on pain clinics and patient-controlled analgesia. (Chrubasik J, Bern, Switzerland and Lehmann KA, Cologne, Germany were the moderators.)

Patient monitoring and data processing were widely discussed. Intraoperative EEG and evoked potentials monitoring are now being introduced in Europe. Among patient safety topics, the importance of having small, battery-operated pulse oximeters during patient transfer (Blumenberg D *et al.*, Würzburg, Germany), the value of intraarterial oximetry and of cardiac output oximetry in cardiac surgeries (Hässler R *et al.*, Munich, Germany) were emphasized. Several papers were devoted to aspects of computerized data-retrieving and automated anesthesia record-keeping. Autotransfusion in surgery was presented in a symposium (Mehrkens HH, Ulm, Germany and Neuberger L, Bern, Switzerland, moderators) while seminars were held on the diagnosis of perioperative myocardial infarction (Metzler H, Graz, Austria and Sonntag H, Göttingen, Germany) on echocardiography and on cardiovascular consequences of perioperative stress (Kettler D, Göttingen, Germany and Skarvan K, Basel, Switzerland).

In the echocardiography session, indications and contraindications of transesophageal echocardiography were outlined by Skarvan K (Basel, Switzerland) and Zuber M (Luzern, Switzerland) first, and discussions on the advantages and disadvantages of intraoperative Doppler echocardiography, including the recent color flow imaging mode by de Bruijn ND and Clements IM (Durham, North Carolina, U.S.A.) completed the session. This complex and expensive technique appears best suited to the evaluation of mitral valve lesions and does not appear to be well suited for detecting aortic stenosis. The same authors also evaluated the role of echocardiography in the detection of myocardial ischemia and emphasized the importance of proper technique for optimal detection of diastolic dysfunction and wall-motion abnormalities.

Several papers dealt with hemodynamic and metabolic changes and monitoring requirements during cardiopulmonary resuscitation (CPR). Prehospital thrombolytic therapy resulted in greater coronary patency rate (Winter H *et al.*, Ulm, Germany). A new, modified endotracheal tube with an endobronchial drug injection port was successfully used in 73 CPR cases (Mielke *et al.*, Munich, Germany). A retrospective study analyzed 172 CPR episodes that occurred postoperatively in a group of more than 3,000 cardiac surgery cases (Adam *et al.*, Leipzig, Germany). This study reported a 10% improvement in the acute recovery rate (70% acute survival post-CPR) over a previous study (Anesthesist 36:362, 1987).

Relatively few reports appeared on significant, new anesthetic and adjuvant drugs. Total intravenous anesthesia with propofol was covered in a symposium sponsored by Imperial Chemical Industries, and the clinical use of a new catecholamine analogue, dexmedetomidine, was discussed at another symposium organized by Fisons Ltd., England. The latter agent seems to be suitable for the short-term treatment of low-output states. It produces a reduction of afterload, along with a positive inotropic action causing only a minor increase of myocardial oxygen demand as compared with other, primarily sympathetic β -receptor stimulants. Several clinical studies were devoted to the evaluation of the S(+)-isomer of ketamine. It is about twice as potent as the commercially available racemate and has a shorter awakening time.

Following the recommendations of the European Academy of Anesthesiology (Eur J Anaesth 5:287, 1988), increasing numbers of studies are using the domestic pig as an animal model. Widely diversified studies were conducted on juvenile domestic pigs, including the investigations of 1) intracranial pressure changes (Jantzen JP *et al.*, Mainz, Germany); 2) blood-brain barrier function (Werba A *et al.*, Vienna, Austria); 3) cerebral function as reflected in cerebral blood flow, cerebral metabolic rate for oxygen, EEG, and ATP levels (Pfenninger E *et al.*, Ulm, Germany); 4) hemodynamic changes and ventilatory requirements during prolonged hypothermia (Rahmel A *et al.*, Göttingen, Germany); 5) metabolic and hemodynamic changes during CPR (Schindler I *et al.*, Vienna, Austria; Lindner KH *et al.*, Ulm, Germany; and Berg PW and Hörnchen U, Bonn, Germany).

The relatively small refresher course program included sessions on 1) management of acute cardiac failure; 2) one-lung anesthesia; 3) perioperative hemodilution; 4) obstetric anesthesia; 5) hemodynamic and end-tidal carbon dioxide monitoring; 6) malignant hyperthermia; 7) hyperalimantation; 8) intravenous

hypnotics and sedatives; 9) opioid analgesia; 10) peripheral nerve blocks; and 11) regional anesthesia in children.

In addition to the scientific program and the conventional opening and closing ceremonies, the Congress featured a theater play on the Swiss national hero William Tell and an outstanding concert by the renowned Camerata Bern chamber ensemble. Optional excursions took the participants to the majestic sites of the nearby Swiss Alps.

In summary, this biannual meeting offered valuable information on current trends both in basic sciences and in clinical practice related to anesthesia; it also revealed a good cross-section of current European anesthesiology as represented by the three Central European German-speaking countries.

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