

Brief Reviews

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ACTA ANAESTHESIOLOGICA SCANDINAVICA

Extracorporeal membrane oxygenation (ECMO) as lung or heart assist.

The heparin-coated system used as extracorporeal lung assist was considered promising in patients with acute respiratory failure.

Almdahl SM, Lie M, Nilsen PA, Hansen K, Solbø J, Jolin Å, Hotvedt R, Olafsen K, Brøndbo A, Thoner J, Gilbert M, Hevrøy O, Bjørsvik G, Hesselberg N, Bergland H, Sivertsen O: *Acta Anaesth Scand* 1996; 40 (3): 293–301

Safety aspects of delivery and monitoring of nitric oxide during mechanical ventilation.

Because an oxidation of NO to NO₂ is continuously taking place in the breathing system, the use of soda lime absorbers interposed between the ventilator and the patient should be employed in order to minimize the delivery of NO₂ to the patient.

Westfelt UN, Lundin S, Stenqvist O: *Acta Anaesth Scand* 1996; 40 (3): 302–310

Heparin-coated circuits reduce the formation of TNF α during cardiopulmonary bypass.

Heparin coating of the extracorporeal circuits may reduce the formation of TNF α during cardiopulmonary bypass, which may reduce neutrophil activation.

Yamada H, Kudoh I, Hirose Y, Toyoshima M, Abe H, Kurahashi K: *Acta Anaesth Scand* 1996; 40 (3): 311–317

ANAESTHESIA

Comparison of bladder, oesophageal and pulmonary artery temperatures in major abdominal surgery.

The bladder temperature was a closer approximation to pulmonary artery temperature than esophageal temperature.

Russell SH, Freeman JW: *Anaesthesia* 1996; 51 (4): 338–340

Assessment of neuromuscular block at the thumb and great toe using accelerography in infants.

Neuromuscular monitoring of the great toe in infants may be a suitable alternative when the thumb is inaccessible.

Kitajima T, Ishii K, Ogata H: *Anaesthesia* 1996; 51 (4): 341–343

A study of the incorrect use of ventilator disconnection alarms.

A majority of clinicians observed in a survey, adjusted the pressure-sensitive ventilator disconnection alarm incorrectly and, thus, might not have discovered a disconnection problem with a discharging compliance ventilator.

Campbell RM, Sheikh A, Crosse MM: *Anaesthesia* 1996; 51 (4): 369–370

Respiratory pattern and rebreathing in the Mapleson A, C, and D breathing systems with spontaneous ventilation. A theory.

A theoretical analysis and simple equations describing the Mapleson A, C, and D breathing systems used in spontaneous respirations are presented. Based on the analysis, the Mapleson A system is considered to be the most efficient of the three systems while the Mapleson D system will be efficient only if the expiratory pause is sufficiently long.

Cook LB: *Anaesthesia* 1996; 51 (4): 371–385

Gas kinetics during nitrous oxide analgesia for labour.

Diffusion hypoxia was of minor importance in episodes of desaturation when parturients used nitrous oxide for labor analgesia.

Einarrsson S, Stenqvist O, Bengtsson A, Noren H, Bengtson JP: *Anaesthesia* 1996; 51 (5): 449–452

The importance of the expiratory pause. Comparison of the Mapleson A, C, and D breathing systems using a lung model.

In a physical lung model with spontaneous respiration, the Mapleson A system was shown always to be the most efficient breathing system with a performance relatively independent of the respiratory pattern.

Cook LB: *Anaesthesia* 1996; 51 (5): 453–460

Low pressure leakage in anaesthesia machines. Evaluation by positive and negative pressure tests.

A positive pressure test helped to identify and rule out unintentional continuous gas flow and the negative pressure test is specific to the problem of gas leakage from the anesthesia machine.

Somprakit P, Soontranan P: *Anaesthesia* 1996; 51 (5): 461–465

ANAESTHESIA AND INTENSIVE CARE

The development of hypercoagulability state, as measured by thromboelastography, associated with intraoperative surgical blood loss.

A mild to moderate degree of surgical blood loss with hemodilution was associated with development of hypercoagulability as measured by thromboelastography.

Ng KFJ, Lo JWR: *Anaesth Int Care* 1996; 24 (1): 20–25

Echocardiography assessment of left ventricular function in the critically ill.

This review article is buttressed by 40 references.

McLean AS: *Anaesth Int Care* 1996; 24 (1): 60–65

Deaths attributed to anaesthesia in New South Wales 1984–1990.

One death attributed to anaesthesia occurred per 20,000 operations and the rate of such deaths was 0.44 per 100,000 population per year.

Warden JC, Horan BF: *Anaesth Int Care* 1996; 24 (1): 66–73

DER ANAESTHESIST

Measurement of expired alcohol concentrations with a new electrochemical sensor. A model investigation to determine interference with volatile anaesthetics and clinical application.

The electrochemical sensor (Alcomed 3010, Envitec) was not influenced by the presence of inhalation anaesthetics in its ability to detect alcohol in gas.

Gehring H, Nahm W, Klotz KF, Knipper A, Zimmermann K, Baerwald J, Schmucker P: *Der Anaesthesist* 1996; 45: 154–162

CANADIAN JOURNAL OF ANAESTHESIA

Anaesthesia crisis resource management training: an intimidating concept, a rewarding experience.

While practitioners participating in simulation sessions valued this training, acknowledgement that simulators are unlikely to be developed into tools for performance evaluation reduced their anxiety.

Kurrek MM, Fish KJ: *Can J Anaesth* 1996; 43 (5): 430–434

Cerebral blood flow velocity after mannitol infusion in children.

Mannitol briefly increased cerebral vascular resistance and thereby diminished cerebral blood volume.

Soriano SG, McManus ML, Sullivan LJ, Rockoff MA, Black PMcL, Burrows FA: *Can J Anaesth* 1996; 43 (5): 461–466

The precipitate formed by thiopentone and vecuronium.

The precipitate formed by thiopentone and vecuronium *in vitro* consisted of thiopentone acid, which was insoluble in human plasma.

Taniguchi T, Yamamoto K, Kobayashi T: *Can J Anaesth* 1996; 43 (5): 511–513

Technology assessment: a Canadian perspective.

This refresher course on technology assessment discusses the assessment from a technical point of view, efficacy, and effectiveness.

Byrick RJ: *Can J Anaesth* 1996; 43 (5u): R108–R112