

6. BIBLIOGRAFIA

- (1) "L'esafluoroisopropanolo urinario nella valutazione dell'esposizione professionale a sevoflurano: aspetti metodologici e punti critici", F. Barbic, M. Bagnati, M. Basile, V. Zanolì, L. Carettoni, C. Cassani, P. Porta, A. Fortina, C. Mantovani, G. Bellomo, G. Ital. Med. Lav. Erg. 2003; 25: 3 Suppl, 95-97
- (2) "Nuovi indicatori di esposizione", P. Apostoli, R. Bergonzi, S. Catalani, G. Neri, M. Sarnico, V. Foà, S. Fustinoni, A. Colombi, M. Buratti, L. Campo, L. Scibetta, N. Sannolo, M. Pieri, A. Basile, G.B. Bertolucci, M. Carrieri, M. L. Scapellato, P. Manini, D. Poli, M. Corradi, R. Andreoli, M. Goldoni, A. Mutti, M. Imbriani, S. Ghittori, L. Maestri, S. Negri, E. Pira, I. Pavan, G. Discalzi, L. Perbellini, G. Ital. Med. Lav. Erg. 2004; 26:4, 278-297
- (3) "Monitoraggio biologico dell'esposizione professionale a sevoflurane", M. Imbriani, P. Zadra, S. Negri, A. Alessio, L. Maestri, S. Ghittori, Med Lav 2001; 92,3: 173-180
- (4) "Hexafluoroisopropanol as biomarker of sevoflurane occupational exposure", R. Bonazzina, A. Martini, Biochimica Clinica, 2005, vol 29, n. 2, pag 189
- (5) "Monitoraggio ambientale e biologico dell'esposizione a sevoflurano in sala operatoria", M. L. Scapellato, M. Carrieri, I. Maccà, J. Moretto, M. Perini, A. Virgili, G. Gori, G.B. Bartolucci, G. Ital. Med. Lav. Erg. 2003; 25: 253-257
- (6) "Proposal for single and mixture biological exposure limits for sevoflurane and nitrous oxide at low occupational exposure levels." , A. Accorsi, S. Valenti, A. Barbieri, G.B. Raffi, F.S. Violante, Int. Arch. Occup. Environ. Health. 2003 Mar; 76(2): 129-36
- (7) "Monitoraggio ambientale e biologico dell'esposizione professionale a xenobiotici – Gas anestetici", C. Minoia, L. Perbellini, Vol. 4, pag. 32-35; Morgan edizioni tecniche
- (8) "Anesthesia in the obese patient: pharmacokinetic considerations.", A. Casati, M. Putzu, J. Clin. Anesth. 2005 Mar; 17(2): 134-45

- (9) "Postoperative results after desflurane or sevoflurane combined with remifentanyl in morbidly obese patients.", L.E. De Baerdemaeker, S. Jacobs, N.M. Den Blauwen, P. Pattyn, L.L. Herregods, E.P. Mortier, M.M. Struys, *Obes. Surg.* 2006 Jun; 16(6): 728-33
- (10) "Wash-in and wash-out curves of sevoflurane and isoflurane in morbidly obese patients.", G. Torri, A. Casati, L. Comotti, E. Bignami, R. Santorsola, M. Scarioni, *Minerva Anesthesiol.* 2002 Jun; 68(6): 523-7
- (11) "Emergence and recovery characteristics of desflurane versus sevoflurane in morbidly obese adult surgical patients: a prospective, randomized study.", E.M. Strum, J. Szenohradzki, W.A. Kaufman, G.J. Anthone, I.L. Manz, P.D. Lumb, *Anesth. Analg.* 2004 Dec; 99(6): 1848-53
- (12) "Biotransformation of sevoflurane.", E.D. Kharasch, *Anesth. Analg.* 1995 Dec; 81(6 Suppl): S27-38
- (13) "Clinical sevoflurane metabolism and disposition. I. Sevoflurane and metabolite pharmacokinetics.", E.D. Kharasch, M.D. Karol, C. Lanni, R. Sawchuk, *Anesthesiology* 1995 Jun; 82(6): 1369-78
- (14) "Clinical sevoflurane metabolism and disposition. II. The role of cytochrome P450 2E1 in fluoride and hexafluoroisopropanol formation.", E.D. Kharasch, A.S. Armstrong, K. Gunn, A. Artru, K. Cox, M.D. Karol, *Anesthesiology* 1995 Jun; 82(6): 1379-88
- (15) "Clinical pharmacokinetics of sevoflurane.", M. Behne, H.J. Wilke, S. Harder, *Clin. Pharmacokinet.* 1999 Jan; 36(1): 13-26
- (16) "Sevoflurane. A review of its pharmacodynamic and pharmacokinetic properties and its clinical use in general anaesthesia.", S.S. Patel, K.L. Goa, *Drugs.* 1996 Apr; 51(4): 658-700
- (17) "Indicatori di dose e di effetto nell'esposizione a sevoflurano", M. L. Scapellato, A. Trevisan, M. Carrieri, I. Maccà, E. Bonfiglio, G. Gori, S. Serraino, G. B. Bartolucci, *G. Ital. Med. Lav. Erg.* 2004; 26: 4, Suppl, 99-101

- (18) "Determination of hexafluoroisopropanol, a sevoflurane urinary metabolite, by 9-fluorenylmethyl chloroformate derivatization.", M. Buratti, C. Valla, D. Xaiz, G. Brambilla, A. Colombi, J. Chromatogr. B. Analyt. Technol. Biomed. Life Sci. 2002 Sep 5; 776(2): 237-43
- (19) "Sevoflurane occupational exposure monitoring: a role of urinary hexafluoroisopropanol", F. Barbic', M. Bagnati, M. Basile, V. Zanolì, L. Caretoni, C. Cassani, P. Porta, A. Fortina, C. Mantovani, G. Bellomo, Poster Session P30. Biomarkers and exposure assessment, s161.
- (20) "Urinary sevoflurane and hexafluoro-isopropanol as biomarkers of low-level occupational exposure to sevoflurane.", A. Accorsi, B. Morrone, I. Domenichini, S. Valenti, G.B. Raffi, F.S. Violante, Int. Arch. Occup. Environ. Health. 2005 Jun; 78(5): 369-78
- (21) "Messa a punto di un metodo di misura del sevoflurano urinario per il monitoraggio biologico della esposizione a basse concentrazioni", C.M. Ansalone, G. Sareletti, V. Crespi, D. Cavallo, R. Borchini, M. Ferrario, G. Ital. Med. Lav. Erg. 2004; 26: 4, Suppl.
- (22) "Biomonitoring of exposure to nitrous oxide, sevoflurane, isoflurane and halothane by automated GC/MS headspace urinalysis.", A. Accorsi, A. Barbieri, G.B. Raffi, F.S. Violante, Int. Arch. Occup. Environ. Health. 2001 Oct; 74(8): 541-8
- (23) "Exposure of personnel to sevoflurane during paediatric anaesthesia: influence of professional role and anaesthetic procedure.", A. Gentili, A. Accorsi, A. Pigna, V. Bachiocco, I. Domenichini, S. Baroncini, F.S. Violante, Eur. J. Anaesthesiol. 2004 Aug; 21(8): 638-45
- (24) "Criteria for recommended standard: occupational exposure to waste anaesthetics gases and vapors.", NIOSH, Cincinnati (OH): DHEW pub N. 71-140, 1977.
- (25) Documento "Controllo dell'esposizione professionale ad anestetici volatili nell'ambito delle sale operatorie", Servizio di Medicina del Lavoro – Sezione di Igiene Industriale – Azienda Ospedaliera "Maggiore della Carità" Novara

- (26) "Clinical comparison of Sevoflurane and isoflurane in healthy patients.", E.J. Frink Jr, T.P. Malan, M. Atlas, L.M. Dominguez, J.A. Di Nardo, B.R. Brown Jr (1992), *Anaesth. Analg.* 74, 241-245
- (27) "Editorial II: Quest for the ideal inhalation anaesthetic agent.", S. Heijke, G. Smith (1990), *Br. J. Anaesth.* 64, 3-6
- (28) "Clinical Impressions and Cardiorespiratory effects of a new Fluorinated inhalation Anaesthetic, desflurane." (I-653), R.M. Jones, J.N. Cashman, T.G.K. Mant (1990), *Br. J. Anaesth.* 64, 482-487
- (29) "Clinical characteristics and biotransformation of Sevoflurane in Healthy human volunteers.", D.A. Holaday, F.R. Smith (1981), *Anesthesiology.* 54, 100-106
- (30) "The safety of sevoflurane in Humans.", M. Moiro, K. Fujii, N. Satoh, (1993), *Anesthesiology* 79, 200-201
- (31) "The safety aspects of sevoflurane in humans.", R.I. Mazze(1992), *Anesthesiology* 77, 1062-1063
- (32) "New inhalational agents desflurane and Sevoflurane.", E.I. Eger 2nd (1993), *Can. J. Anaesth.* 40, 3-8
- (33) "Desflurane and Sevoflurane: Inhalation anaesthetics for this decade?", R.M. Jones (1990), *Br. J. Anaesth.* 65, 527-536
- (34) "Possible association of malignant hyperthermia with sevoflurane anesthesia.", R. Ochiai, Y. Toyoda, I. Nishio, J. Takeda, H. Sekiguchi, K. Fukushima, E. Kohda (1992), *Anaesth. Analg.* 74, 616-618
- (35) "Malignant hyperthermia during sevoflurane anesthesia in a child with central core disease.", H. Otsuka, Y. Komura, T. Mayumi, T. Yamamura, O. Kemmotsu, K. Mukaida, *Anesthesiology.* 1991 Oct;75(4):699-701
- (36) "Arterial Baroreflex function in Humans anesthetized with Sevoflurane.", M. Tanaka, T. Nishikawa (1999), *Br. J. Anaesth.* 82 (3): 350-354

- (37) "Sevoflurane causes more postoperative pain agitation in children than does halothane.", A. Beskow, P. Westrin (1999), *Acta Anaesthesiol. Scand.* 43, 536-541
- (38) "The pharmacology of sevoflurane in infants and children.", J. Lerman, N. Sikich, S. Kleinman, S. Yentis, (1994), *Anesthesiology* 80, 814-824
- (39) "Seizure-like movements during induction of anaesthesia with sevoflurane.", M. Adachi, Y. Ikemoto, K. Kubo, C. Takuma (1992), *Br. J. Anaesthesiol.* 68, 214-215
- (40) "Plasma inorganic fluoride with sevoflurane anesthesia: correlation with indices of hepatic and renal function.", E.J. Frink Jr., H. Ghantous, T. Malan, S. Morgan, J. Fernando, A.J. Gandolfi, B.R. Brown Jr. (1992), *Anaesth. Analg.* 74, 231-235
- (41) "Renal concentrating function with prolonged Sevoflurane or Enflurane Anesthesia in volunteers.", E.J. Frink Jr., T.P. Malan Jr., R.J. Insear, E.A. Brown, S.E. Morgan, B. Brown Jr. (1994), *Anesthesiology* 80, 1019-1025
- (42) "Serum and urinary fluoride concentrations after prolonged inhalation of Sevoflurane in Humans.", Y. Kobayishi, R. Ochiai, J. Takeda, H. Sekiguchi, N. Fukushima (1992), *Anaesth. Analg.* 74, 753-757
- (43) "The effects of sevoflurane on serum creatinine and blood urea nitrogen concentration: A Retrospective twenty two center comparative evaluation of renal function in adult surgical patients.", R.I. Mazze, C.M. Callan, S.T. Calvez, L. Delgado Herrera, D.B. Mayer (2000), *Anaesth. Analg.* 90(3), 683-688
- (44) "Urine concentrating ability after prolonged sevoflurane anaesthesia.", H. Higuchi, S. Arimura, H. Sumikura, et al., *Br. J. Anaesth.* 1994; 73:239-40
- (45) "Identification of cytochromes P450 2E1 as the predominant enzyme catalyzing human liver microsomal defluorination of sevoflurane, isoflurane and methoxyflurane.", E.D. Kharasch, K.E. Thummel K. (1993), *Anesthesiology* 79, 795-807

- (46) "Sevoflurane Anaesthesia for major intraabdominal surgery.", A.C. Quinn, P.J. Newman, G.M. Hall, R.M. Grounds (1994), *Anaesth* 49, 567-571
- (47) "Comparison of induction, maintenance, and recovery characteristics of Sevoflurane-N₂O and Propofol-Sevoflurane-N₂O with propofol-isoflurane-N₂O Anaesthesia.", I. Smith, Y. Ding, P.F. White (1992), *Anaesth. Analg.* 74, 253-259
- (48) "Vital Capacity breath technique for rapid anaesthetic induction: Comparison of sevoflurane and Isoflurane.", M. Yurino, H. Kimura (1992), *Anaesthesia* 47, 946-949
- (49) "Induction of anaesthesia with Sevoflurane, nitrous Oxide and Oxygen: A Comparison of Spontaneous ventilation and vital capacity of rapid inhalation induction (VCR II) techniques.", M. Yurino, H. Kimura (1993), *Anaest. Analg.* 76, 508-601
- (50) "Vital Capacity rapid inhalation induction technique: Comparison of Sevoflurane and Halothane.", M. Yurino, H. Kimura (1993), *Can. J. Anaesth.* 40, 440-443
- (51) "Respiratory effects of sevoflurane.", M. Doi, K. Ikeda (1987), *Anesth. Analg.* 66, 241-244
- (52) "Airway irritation produced by volatile anaesthetics during brief inhalation. Comparison of halothane, enflurane, isoflurane and sevoflurane.", M. Doi, K. Ikeda (1993), *Can. J. Anaesth.* 40, 122-126
- (53) Product Information: Ultane[®], sevoflurane, (1996), Abbott Laboratories, North Chicago, IL.
- (54) "Closed-circuit anaesthesia with sevoflurane in humans: Effects on renal and hepatic function and concentrations of breakdown products with soda lime in the circuit.", H. Bito, K. Ikeda, (1994), *Anesthesiology* 80, 71-76

- (55) "Effects of the water content of soda lime on compound A concentration in the anesthesia circuit in sevoflurane anesthesia.", H. Bito, Y. Ikeuchi, K. Ikeda, *Anesthesiology*. 1998 Jan;88(1):66-71
- (56) "Dry soda lime markedly degrades sevoflurane during simulated inhalation induction. ", W. Funk, M. Gruber, K. Wild, J. Hobbhahn, *Br. J. Anaesth.* 1999 Feb; 82(2):193-8
- (57) "Compound A: toxicology and clinical relevance.", E.D. Kharasch, (1998), *Anaesthesist*. 47, 7-10 (Suppl.1)
- (58) "Compound A concentration is decreased by cooling anaesthetic circuit during low-flow sevoflurane anaesthesia." M. Osawa, T. Shinomura (1998), *Can. J. Anaesth.* 45(12), 1215-1218
- (59) "Chronic exposure to anesthetic gases affects balance control in operating room personnel.", A. Vouriot, G.C. Gauchard, N. Chau, R. Nadif, J.M. Mur, P.P. Perrin, *Neurotoxicology* 2005 Mar; 26(2): 193-8
- (60) "Occupational exposure to volatile anaesthetics: epidemiology and approaches to reducing the problem.", C. Byhahn, H.J. Wilke, K. Westphal, *CNS Drugs*. 2001; 15(3): 197-215
- (61) "Health risks and occupational exposure to volatile anaesthetics - a review with a systematic approach" R. Nilsson, C. Björdal, M. Anderson, J. Björdal, A. Nyberg, B. Welin, A. Willman, *Journal of clinical nursing*, 2005, 14, 173-186
- (62) "Multiple sclerosis in nurse anaesthetists", U. Flodin, A. M. Landtblom, O. Axelson, *Occup. Environ. Med.* 2003; 60; 66-68
- (63) "The risk for multiple sclerosis in female nurse anaesthetists: a register based study", A. M. Landtblom, M. Tondel, P. Hjalmarsson, U. Flodin, O. Axelson, *Occup. Environ. Med.* 2006; 63; 387-389
- (64) "Biological indices of kidney involvement in personnel exposed to sevoflurane in surgical areas.", A. Trevisan, M.B.Venturini, M. Carrieri, M.

- Giraldo, I. Macca, M. Perini, M.L. Scapellato, A. Virgili, G.B. Bartolucci, Am. J. Ind. Med. 2003 Nov; 44(5): 474-80
- (65) "Spectrum and subcellular determinants of fluorinated anesthetic-mediated proximal tubular injury.", K.M. Lochhead, E.D. Kharasch, R.A Zager, Am. J. Pathol. 1997 Jun; 150(6): 2209-21
- (66) "Renal toxicity with sevoflurane: a storm in a teacup?", B.A. Gentz, T.P. Malan Jr., Drugs. 2001; 61(15): 2155-62
- (67) "Nephrotoxicity of halogenated inhalational anaesthetics: fictions and facts.", F.M. Reichle, P.F. Conzen, K. Peter, Eur. Surg. Res. 2002 Jan-Apr; 34 (1-2): 188-95
- (68) "Renal effects of sevoflurane during conditions of possible increased risk", A.A. Artru, J. Clin. Anesth. 1998 Nov; 10(7): 531-8
- (69) "Effects of chronic occupational exposure to anaesthetic gases on the rate of neutrophil apoptosis among anaesthetists", R. Tyther, M. Halligan, J. Wang, H.P. Redmond, G. Shorten, Eur. J. Anaesthesiol. 2002 Aug; 19(8): 604-8
- (70) "Sevoflurane-induced oxidative stress and cellular injury in human peripheral polymorphonuclear neutrophils.", C.H. Wong, T.Z. Liu, S.M. Chye, F.J. Lu, Y.C. Liu, Z.C. Lin, C.H. Chen, Food Chem. Toxicol. 2006 Aug; 44(8): 1399-407
- (71) "A comparison of sister chromatid exchanges in lymphocytes of anesthesiologists to nonanesthesiologists in the same hospital.", A. Eroglu, F. Celep, N. Erciyes, Anesth. Analg. 2006 May;102(5):1573-7
- (72) "Cytogenetic tests performed on operating room personnel (the use of anaesthetic gases).", M. Bilban, C.B. Jakopin, D. Ogrinc, Int. Arch. Occup. Environ. Health. 2005 Feb;78(1):60-4
- (73) "Anesthetics (Sevoflurane) biomonitoring : urinary hexafluoroisopropanolol removal kinetics. Proceedings of the 10th International Congress of Toxicology. Living in a Safe Chemical World", F. Barbic', M. Bagnati, M.

Basile, V. Zanolì, C. Cassani, P. Porta, C. Mantovani, G. Bellomo, C. Colosso, 11-15 July 2004, Tampere, Finland, p.324

- (74) "Biological monitoring of exposure to sevoflurane in operating room personnel by measurement of hexafluoroisopropanol and fluoride in urine.", V. Haufroid, S. Gardinal, C. Licot et al. (2000), *Biomarkers* 5: 141-151
- (75) "A simplified gas chromatographic method for quantifying the sevoflurane metabolite hexafluoroisopropanol.", S.E. Morgan, E.J. Frink, A.J. Gandolfi (1994), *Anesthesiology* 80, 201-205
- (76) "Campionamento attivo e passivo nel monitoraggio ambientale del sevoroano. Studio preliminare", M. Bagnati, F. Barbic', M. Basile, C. Cassani, A. Fortina, C. Mantovani, P. Porta, V. Zanolì, G. Bellomo, *Biochimica Clinica*, 2005, vol. 29, n. 2, pag. 194
- (77) "Recovery and kinetic characteristics of desflurane and sevoflurane in volunteers after 8-h exposure, including kinetics of degradation products.", E.I. 2nd Eger, T. Bowland, P. Ionescu, M.J. Laster, Z. Fang, D. Gong, J. Sonner, R.B. Weiskopf, *Anesthesiology*. 1997 Sep; 87(3): 517-26