

**Practice Guidelines for Preoperative Fasting and the Use of Pharmacologic Agents  
for Prevention of Pulmonary Aspiration: Bibliography**

*American Society of Anesthesiologists*

1. Abe K., Shibata M., Demizu A., Hazano S., Sumikawa K. Effect of oral and intramuscular famotidine on pH and volume of gastric contents. *Anesth Analg* 68:541-544, 1989
2. Adelholj B, Petring OU, Frosig F, Bigler DR, Jensen BN: Influence of cigarette smoking on the risk of acid pulmonary aspiration. *Acta Anaesthesiol Scand* 31:7-9, 1987
3. Adelholj B, Petring OU, Pedersen NO, Andersen RD, Busch P, Vestergaard AS: Metoclopramide given preoperatively empties the stomach. *Acta Anaesthesiol Scand* 29:322-325, 1985
4. Agarwal A, Chari P, Singh H: Fluid deprivation before operation. The effect of a small drink. *Anaesthesia* 44:632-634, 1989
5. Allen GD, Ricks CS, Jorgensen NB: The efficacy of the laryngeal reflex in conscious sedation. *J Am Dent Assoc* 94:901-903, 1977
6. Allman KG: The effect of cricoid pressure application on airway patency. *J Clin Anesth* 7:197-199, 1995
7. Ambiavagar M, Chan OL, Pais FW, D'Bras BE: The acid aspiration syndrome. *Singapore Med J* 8:35-42, 1967
8. Andrews A.D., Brock Utne J.G., Downing J.W. Protection against pulmonary acid aspiration with ranitidine. *Anaesthesia* 37:22-25, 1982
9. Aromaa U, Kalima TV: Ranitidine and prevention of pulmonary aspiration syndrome. *Acta Anaesthesiol Scand* 30:10-12, 1986
10. Atanassoff PG, Rohling R, Alon E, Brull SJ: Effects of single-dose oral ranitidine and sodium citrate on gastric pH during and after general anaesthesia. *Can J Anaesth* 42:382-386, 1995
11. Aun CS, Panesar NS: Paediatric glucose homeostasis during anaesthesia. *Br J Anaesth* 64:413-418, 1990
12. Barnes J.P., Havill J.H. Preoperative cimetidine - effects on gastric fluid. *Anaes Intens Care* 8:464-468, 1980
13. Barnes T.R.E., Braude W.M., Hill D.J. Acute akathisia after oral droperidol and metoclopramide preoperative medication. *Lancet* 2:48-49, 1982
14. Barr AM, Thornley BA: Thiopentone and suxamethonium crash induction. An assessment of the potential hazards. *Anaesthesia* 31:23-29, 1976
15. Barr AM, Thornley BA: Thiopentone and fazadinium crash induction. A comparison with thiopentone and pancuronium. *Anaesthesia* 35:164-168, 1980
16. Berson W., Andriani J. Silent regurgitation and aspiration during anesthesia. *Anesthesiology* 15:644-649, 1954
17. Bevan J.C., Burn M.C. Acid base changes and anaesthesia: the influence of preoperative starvation and feeding in paediatric surgical patients. *Anaesthesia* 28:415-422, 1973
18. Blitt CD, Gutman HL, Cohen DD, Weisman H, Dillon JB: "Silent" regurgitation and aspiration during general anesthesia. *Anesth Analg* 49:707-713, 1970
19. Bloch EC: Mendelson's syndrome--a case report. *S Afr Med J* 41:314-317, 1967

20. Bolsin SN, Gillbe C: Opitz-Frias syndrome. A case with potentially hazardous anaesthetic implications. *Anaesthesia* 40:1189-1193, 1985
21. Boulay K, Blanloel Y, Bourveau M, Geay G, Malinovsky JM: Effects of oral ranitidine, famotidine and omeprazole on gastric volume and pH at induction and recovery from general anaesthesia. *Br J Anaesth* 73:475-478, 1994
22. Bourne TM, Raphael JH, Tordoff SG: Anaesthesia for a patient with tracheobronchomegaly (Mounier-Kuhn syndrome). *Anaesthesia* 50:545-546, 1995
23. Bricker SR, McLuckie A, Nightingale DA: Gastric aspirates after trauma in children. *Anaesthesia* 44:721-724, 1989
24. Brock utne JG, Downing JW, O'Keefe SJ, Gjessing J: Protection against acid pulmonary aspiration with cimetidine. *Anaesth Intensive Care* 11:138-140, 1983
25. Browne CH, Chew HE, Clark E, Edwards JM, Hanson GC, Roberts KD: The management of the pulmonary aspiration syndrome. *Intensive Care Med* 3:257-266, 1977
26. Burgess G.E., Cooper J.R., Marino R.J., Peuler M.J., Warriner R.A., III: Laryngeal competence after tracheal extubation. *Anesthesiology* 51:73-77, 1979
27. Bynum LJ, Pierce AK: Pulmonary aspiration of gastric contents. *Am Rev Respir Dis* 114:1129-1136, 1976
28. Caldwell C., Rains G., McKitterick K. An unusual reaction to preoperative metoclopramide. *Anesthesiology* 67:854-855, 1987
29. Callander P., Humphrey D., Brock Utne J.G. The use of gastrozepin as a prophylaxis against pulmonary acid aspiration: a new muscarinic receptor antagonist. *Eur J Anaesth* 4:149-153, 1987
30. Cameron JL, Mitchell WH, Zuidema GD: Aspiration pneumonia. Clinical outcome following documented aspiration. *Arch Surg* 106:49-52, 1973
31. Campbell RL, Paulette SW: Pulmonary aspiration during general anesthesia. *Anesth Prog* 33:98-101, 1986
32. Capan L.M., Rosenberg A.D., Carni A., Patel K.P., Sheth R., Kitain E., Turindorf H. Effect of cimetidine-metoclopramide combination on gastric fluid volume and acidity. *Anesthesiology* 59:A4021983
33. Carlsson C, Islander G: Silent gastropharyngeal regurgitation during anesthesia. *Anesth Analg* 60:655-657, 1981
34. Chen CT, Toung TJ, Haupt HM, Hutchins GM, Cameron JL: Evaluation of the efficacy of Alka-Seltzer Effervescent in gastric acid neutralization. *Anesth Analg* 63:325-329, 1984
35. Cheney FW, Posner KL, Caplan RA: Adverse respiratory events infrequently leading to malpractice suits. A closed claims analysis. *Anesthesiology* 75:932-939, 1991
36. Coombs DW, Hooper D, Colton T: Acid-aspiration prophylaxis by use of preoperative oral administration of cimetidine. *Anesthesiology* 51:352-356, 1979
37. Coombs DW, Hooper D, Colton T: Pre-anesthetic cimetidine alteration of gastric fluid volume and pH. *Anesth Analg* 58:183-188, 1979
38. Coombs DW, Hooper DW: Cimetidine as a prophylactic against acid aspiration at tracheal extubation. *Can Anaesth Soc J* 28:33-38, 1981
39. Cramb R, Fargas Babjak A, Hirano G: Intraoperative prochlorperazine for prevention of post-operative nausea and vomiting. *Can J Anaesth* 36:565-567, 1989

40. Crawford M, Lerman J, Christensen S, Farrow Gillespie A: Effects of duration of fasting on gastric fluid pH and volume in healthy children. *Anesth Analg* 71:400-403, 1990
41. Cromartie RS, III: Rapid anesthesia induction in combat casualties with full stomachs. *Anesth Analg* 55:74-76, 1976
42. Cruickshank RH, Morrison DA, Bamber PA, Nimmo WS: Effect of i.v. omeprazole on the pH and volume of gastric contents before surgery. *Br J Anaesth* 63:536-540, 1989
43. Culver G.A., Makel H.P., Beecher H.K. Frequency of aspiration of gastric contents by the lungs during anesthesia and surgery. *Ann Surg* 133:2891951
44. Davies JA, Howells TH: Management of anaesthesia for the full stomach case in the casualty department. *Postgrad Med J* 49:58-63, 1973
45. Detmer MD, Pandit SK, Cohen PJ: Prophylactic single-dose oral antacid therapy in the preoperative period-- comparison of cimetidine and Maalox. *Anesthesiology* 51:270-273, 1979
46. Dick W: [Acute Mendelsohn's syndrome. (Case report)]. *Anaesthetist* 18:196-198, 1969
47. Dimich I, Katende R, Singh PP, Mikula S, Sonnenklar N: The effects of intravenous cimetidine and metoclopramide on gastric pH and volume in outpatients. *J Clin Anesth* 3:40-44, 1991
48. Dines DE, Baker W.G., Scantland W.A. Aspiration pneumonitis - Mendelson's syndrome. *JAMA* 176:229-231, 1961
49. Dobb G, Jordan MJ, Williams JG: Cimetidine in the prevention of the pulmonary acid aspiration (Mendelson's) syndrome. *Br J Anaesth* 51:967-970, 1979
50. Dufour DG, Larose DL, Clement SC: Rapid sequence intubation in the emergency department. *J Emerg Med* 13:705-710, 1995
51. Durrant JM, Strunin L: Comparative trial of the effect of ranitidine and cimetidine on gastric secretion in fasting patients at induction of anaesthesia. *Can Anaesth Soc J* 29:446-451, 1982
52. Elliott RH, Graham SG, Curran JP: Sustained release metoclopramide for prophylaxis of post-operative nausea and vomiting. *Eur J Anaesthesiol* 11:465-467, 1994
53. Enoki T., Hatano Y., Tsujimura Y., Nomura R. Attenuation of gastric effects of famotidine by preoperative administration of intravenous fluids. *Anesth Analg* 74:68-71, 1992
54. Escolano F, Castano J, Pares N, Bisbe E, Monterde J: Comparison of the effects of famotidine and ranitidine on gastric secretion in patients undergoing elective surgery. *Anesthesia* 44:212-215, 1989
55. Faure E.A.M., Lim H.S., Block B.S., Tan P.L., Roizen M.F. Sodium bicarbonate buffers gastric acid during surgery in obstetric and gynecologic patients. *Anesthesiology* 67:274-277, 1987
56. Foulkes E, Jenkins LC: A comparative evaluation of cimetidine and sodium citrate to decrease gastric acidity: effectiveness at the time of induction of anaesthesia. *Can Anaesth Soc J* 28:29-32, 1981
57. Francis RN, Kwik RS: Oral ranitidine for prophylaxis against Mendelson's syndrome. *Anesth Analg* 61:130-132, 1982
58. Frank M, Evans M, Flynn P, Aun C: Comparison of the prophylactic use of magnesium trisilicate mixture B.P.C., sodium citrate mixture or cimetidine in obstetrics. *Br J Anaesth* 56:355-362, 1984

59. Friesen RH, Honda AT, Thieme RE: Changes in anterior fontanel pressure in preterm neonates during tracheal intubation. *Anesth Analg* 66:874-878, 1987
60. Froelich J, Eagle CJ: Anaesthetic management of a patient with myasthenia gravis and tracheal stenosis. *Can J Anaesth* 43:84-89, 1996
61. Gabrielsen J, Valentin N: Routine induction of anaesthesia with thiopental and suxamethonium: apnoea without ventilation? *Acta Anaesthesiol Scand* 26:59-62, 1982
62. Gallagher JD, Smith DS, Meranze J, Nicolson SC, Godinez RI: Aspiration during induction of anaesthesia in patients with colon interposition. *Can Anaesth Soc J* 32:56-59, 1985
63. Gardner AM, Pryer DL: Historical and experimental study of aspiration of gastric and oesophageal contents into the lungs in anaesthesia. *Br J Anaesth* 38:370-379, 1966
64. Garner A.M.N. Aspiration of food and vomit. *Q J Med* 27:2271958
65. Gilbert SS, Easy WR, Fitch WW: The effect of pre-operative oral fluids on morbidity following anaesthesia for minor surgery. *Anaesthesia* 50:79-81, 1995
66. Gipson SL, Stovall TG, Elkins TE, Crumrine RS: Pharmacologic reduction of the risk of aspiration. *South Med J* 79:1356-1358, 1986
67. Gombar S, Kiran S, Gupta M, Gombar K, Chhabra B: Preanaesthetic oral ranitidine, omeprazole and metoclopramide for modifying gastric fluid volume and pH [letter]. *Can J Anaesth* 41:879-880, 1994
68. Gonzalez ER, Butler SA, Jones MK, Morford DA, Walsh WM, Kellar SK: Cimetidine versus ranitidine: single-dose, oral regimen for reducing gastric acidity and volume in ambulatory surgery patients. *Drug Intell Clin Pharm* 21:192-195, 1987
69. Gonzalez ER, Kellar SK, Dunnivant BW: Single-dose intravenous H<sub>2</sub> blocker prophylaxis against aspiration pneumonitis: assessment of drug concentration in gastric aspirate. *AANA J* 57:238-243, 1989
70. Goodwin AP, Rowe WL, Ogg TW, Samaan A: Oral fluids prior to day surgery. The effect of shortening the pre-operative fluid fast on postoperative morbidity. *Anaesthesia* 46:1066-1068, 1991
71. Goudsouzian N, Cot'e CJ, Liu LM, Dedrick DF: The dose-response effects of oral cimetidine on gastric pH and volume in children. *Anesthesiology* 55:533-536, 1981
72. Goyagi T, Kihara S, Harukuni I, Sato S: [Comparison of airway complications on tracheal extubation in deeply sevoflurane anesthetized versus awake children]. *Masui* 44:1242-1245, 1995
73. Greuel H: [Clinical picture of gastric juice inhalation. (Mendelson syndrome)]. *Dtsch Med Wochenschr* 95:1728-1731, 1970
74. Griffin RM, Hatcher IS: Aspiration pneumonia and the laryngeal mask airway [see comments]. *Anaesthesia* 45:1039-1040, 1990
75. Gronnebech H, Johansson G, Smedebol M, Valentin N: Glycopyrrolate vs. atropine during anaesthesia for laryngoscopy and bronchoscopy. *Acta Anaesthesiol Scand* 37:454-457, 1993
76. Hamelberg W., Bosomworth P.P. Aspiration pneumonitis: experimental studies and clinical observations. *Anesth Analg* 43:669-677, 1964
77. Hannon VM, Cunningham AJ, Hutchinson M, McNicholas W: Aspiration pneumonia and coma--an unusual presentation of dystrophic myotonia. *Can Anaesth Soc J* 33:803-806, 1986

78. Hardy JF, Lepage Y, Bonneville Chouinard N: Occurrence of gastroesophageal reflux on induction of anaesthesia does not correlate with the volume of gastric contents. *Can J Anaesth* 37:502-508, 1990
79. Harris PW, Morison DH, Dunn GL, Fargas Babjak AM, Moudgil GC, Smedstad KG, Woo J: Intramuscular cimetidine and ranitidine as prophylaxis against gastric aspiration syndrome--a randomized double-blind study. *Can Anaesth Soc J* 31:599-603, 1984
80. Haskins D.A., Jahr JS, Texidor M., Ramadhyani U. Single-dose oral omeprazole for reduction of gastric residual acidity in adults for outpatient surgery. *Acat Anesth Scan* 36:513-511, 1992
81. Hedden M, Miller GJ: Mendelson's syndrome and its sequelae. *Can Anaesth Soc J* 19:351-359, 1972
82. Henderson JM, Spence DG, Clarke WN, Bonn GG, Noel LP: Sodium citrate in paediatric outpatients. *Can J Anaesth* 34:560-562, 1987
83. Hester JB, Heath ML: Pulmonary acid aspiration syndrome: should prophylaxis be routine? *Br J Anaesth* 49:595-599, 1977
84. Hett DA, Scott RC, Risdall JE: Lansoprazole in the prophylaxis of acid aspiration during elective surgery. *Br J Anaesth* 74:614-615, 1995
85. Hirabayashi Y, Saitoh K, Fukuda H, Shimizu R: [Atropine has little significance as a premedication for spinal anesthesia]. *Masui* 43:306-310, 1994
86. Hofley MA, Hofley PM, Keon TP, Gallagher PR, Poon C, Liacouras CA: A placebo-controlled trial using intravenous atropine as an adjunct to conscious sedation in pediatric esophagogastroduodenoscopy. *Gastrointest Endosc* 42:457-460, 1995
87. Husemeyer RP, Davenport HT, Rajasekaran T: Cimetidine as a single oral dose for prophylaxis against Mendelson's syndrome. *Anaesthesia* 33:775-778, 1978
88. Hutchinson A., Maltby JR, Reid CRG: Gastric fluid volume and pH in elective patients: Part I: coffee or orange juice versus overnight fast. *Can J Anaesth* 35:12-15, 1988
89. Hutchinson BR: Preoperative magnesium trisilicate in infants. *Anaesth Intensive Care* 4:192-195, 1976
90. Illing L, Duncan PG, Yip R: Gastroesophageal reflux during anaesthesia. *Can J Anaesth* 36:S123-S124, 1989
91. Ishihara H, Singh H, Giesecke AH: Relationship between diabetic autonomic neuropathy and gastric contents. *Anesth Analg* 78:943-947, 1994
92. Jacobs BR, Swift CA, Dubow HD, Kosarussavadi B, McGoldrick K, O'Connor TZ, Silverman DG: Time required for oral ranitidine to decrease gastric fluid acidity. *Anesth Analg* 73:787-789, 1991
93. Jahr JS, Burckart G, Smith SS, Shapiro J, Cook DR: Effects of famotidine on gastric pH and residual volume in pediatric surgery. *Acta Anaesthesiol Scand* 35:457-460, 1991
94. Jones CW: Aspiration during anesthesia--a case in point. *J Natl Med Assoc* 61:324-326, 1969
95. Jorgensen BG, Holm HE: Anaesthetic implications of long term diabetic complications. *Acta Anaesthesiol Scand* 39:560-562, 1995
96. Joshi R, Sivaganesanathan A: Tiapride versus metoclopramide: comparison after minor gynaecological surgery. *Eur J Anaesthesiol* 10:109-112, 1993
97. Kawasaki J, Kawazoe T: [The recent trend in preoperative fasting]. *Masui* 44:1154-1158, 1995

98. Kemmotsu O, Mizushima M, Morimoto Y, Numazawa R, Kaseno S, Yamamura T, Yokota S: Effect of preanesthetic intramuscular ranitidine on gastric acidity and volume in children. *J Clin Anesth* 3:451-455, 1991
99. Khalil SN, Kataria B, Pearson K, Conahan T, Kallar S, Zahl K, Gillies B, Campbell C, Brahen N, Gilmour I, et al: Ondansetron prevents postoperative nausea and vomiting in women outpatients. *Anesth Analg* 79:845-851, 1994
100. Khawaja AA: Reduction of the aspiration hazard in anaesthesia: use of methohexitone-suxamethonium mixtures. *Med J Malaya* 25:295-297, 1971
101. Khawaja AA: A rapid intubation technique for prevention of aspiration during induction of anaesthesia. *Br J Anaesth* 43:980-983, 1971
102. Kirkegaard P, Sorensen O: Cimetidine in the prevention of acid aspiration during anesthesia. *Acta Anaesthesiol Scand* 24:58-60, 1980
103. Kitagawa E, Kubota M, Kaekura N, Fujisawa T, Fukushima K: Effect of roxatidine acetate for handicapped patients under general anesthesia. *Anesth Prog* 36:169-171, 1989
104. Kluger MT, Owen H, Plummer JL, McLean C: The effect of oral cisapride premedication on fasting gastric volumes. *Anaesth Intensive Care* 23:687-690, 1995
105. Korttila K, Kauste A, Auvinen J: Comparison of domperidone, droperidol, and metoclopramide in the prevention and treatment of nausea and vomiting after balanced general anesthesia. *Anesth Analg* 58:396-400, 1979
106. Kraus GB, Braun GG, Gotz H, Raithel S, Danner U: Administration of Famotidine for anesthesia in pediatric patients. Effect of various doses on the pH and volume of the gastric juice. *Anesthesist* 39:587-592, 1990
107. Larsson S, Jonmarker C: Postoperative emesis after pediatric strabismus surgery: the effect of dixyrazine compared to droperidol. *Acta Anaesthesiol Scand* 34:227-230, 1990
108. Lee C, Barnes A, Nagel EL: Neuroleptanalgesia for awake pronation of surgical patients. *Anesth Analg* 56:276-278, 1977
109. Lehot J.J., Deleat-Besson R., Bastien O., Brun Y., Adeleine P., Robin J., Estanove S. Should we inhibit gastric acid secretion before cardiac surgery? *Anesth Analg* 70:185-190, 1990
110. Lerman J, Christensen SK, Farrow-Gillespie AC: Effects of metoclopramide and ranitidine on gastric fluid pH and volume in children. *Can J Anaesth* 35:S142-S143, 1988
111. Licina MG, Newsome LR, Reeder DA, Hug CC, Jr., Moldenhauer CC: Sufentanil and succinylcholine for rapid-sequence anesthetic induction and tracheal intubation: hemodynamic and hormonal responses [see comments]. *J Cardiothorac Anesth* 4:318-322, 1990
112. Litman RS, Wu CL, Quinlivan JK: Gastric volume and pH in infants fed clear liquids and breast milk prior to surgery [see comments]. *Anesth Analg* 79:482-485, 1994
113. Lupien AE, Taylor C: Hybrid intubation technique for the management of a difficult airway: a case report. *AANA J* 63:50-52, 1995
114. Lyew MA, Behl SP: Anticholinergic pre-treatment in rigid bronchoscopy. Effect on heart rate, arterial blood pressure and cardiac arrhythmias. *Acta Anaesthesiol Belg* 41:25-31, 1990
115. Maekawa N, Mikawa K, Yaku H, Nishina K, Obara H: Effects of 2-, 4- and 12-hour fasting intervals on preoperative gastric fluid pH and volume, and plasma glucose and lipid homeostasis in children. *Acta Anaesthesiol Scand* 37:783-787, 1993

116. Maile C.J.D., Francis R.N. Preoperative ranitidine: effect of a single intravenous dose on pH and volume of gastric aspirate. *Anaesthesia* 38:324-326, 1983
117. Maltby JR, Hamilton RC: Preoperative fasting guidelines for cataract surgery under regional anaesthesia [letter; comment]. *Br J Anaesth* 71:1671993
118. Maltby JR, Koehli N., Shaffer E.A. Gastric fluid volume, pH, and emptying in elective inpatients. Influences of narcotic atropine premedication, oral fluid, and ranitidine. *Can J Anaesth* 35:562-566, 1988
119. Maltby JR, Lewis P, Martin A, Sutherland LR: Gastric fluid volume and pH in elective patients following unrestricted oral fluid until three hours before surgery. *Can J Anaesth* 38:425-429, 1991
120. Maltby JR, Sutherland AD, Sale J.P., Shaffer E.A. Is "NPO after midnight" justified? *Anesthesiology* 65:A2441986
121. Maltby JR, Sutherland AD, Sale JP, Shaffer EA: Preoperative oral fluids: is a five-hour fast justified prior to elective surgery? *Anesth Analg* 65:1112-1116, 1986
122. Manchikanti L, Colliver JA, Marrero TC, Roush JR: Ranitidine and metoclopramide for prophylaxis of aspiration pneumonitis in elective surgery. *Anesth Analg* 63:903-910, 1984
123. Manchikanti L, Colliver JA, Marrero TC, Roush JR: Assessment of age-related acid aspiration risk factors in pediatric, adult, and geriatric patients [published erratum appears in *Anesth Analg* 1986 Feb;65(2):210]. *Anesth Analg* 64:11-17, 1985
124. Manchikanti L, Colliver JA, Roush JR, Canella MG: Evaluation of ranitidine as an oral antacid in outpatient anesthesia. *South Med J* 78:818-822, 1985
125. Manchikanti L, Grow JB, Colliver JA, Hadley CH, Hohlbein LJ: Bicitra (sodium citrate) and metoclopramide in outpatient anesthesia for prophylaxis against aspiration pneumonitis. *Anesthesiology* 63:378-384, 1985
126. Manchikanti L, Marrero TC, Roush JR: Preanesthetic cimetidine and metoclopramide for acid aspiration prophylaxis in elective surgery. *Anesthesiology* 61:48-54, 1984
127. Manchikanti L, Roush JR: Effect of preanesthetic glycopyrrolate and cimetidine on gastric fluid pH and volume in outpatients. *Anesth Analg* 63:40-46, 1984
128. Mankowitz E, Khan MF, Downing JW, Brock utne JG, Holloway AM: Inhalation of gastric contents [letter]. *Br J Anaesth* 53:778-779, 1981
129. Marx GF, Steen SN, Berenyi KJ, Foster ES, Erlanger HL, Kepes ER, Schapira M: Hazards of "crash" induction-intubation technic. *N Y State J Med* 68:1957-1958, 1968
130. Mathews HM, Moore J: Sodium bicarbonate as a single dose antacid in obstetric anaesthesia. *Anaesthesia* 44:590-591, 1989
131. Mathews HM, Wilson CM, Thompson EM, Moore J: Combination treatment with ranitidine and sodium bicarbonate prior to obstetric anaesthesia. *Anaesthesia* 41:1202-1206, 1986
132. McAllister JD, Moote CA, Sharpe MD, Manninen PH: Random double-blind comparison of nizatidine, famotidine, ranitidine and placebo. *Can J Anaesth* 37:S221990
133. McGrady E.M., Macdonald A.G. Effect of the preoperative administration of water on gastric volume and pH. *Br J Anaesth* 60:803-805, 1988

134. McKenzie R, Sharifi Azad S, Dershwitz M, Miguel R, Joslyn AF, Tantisira B, Rosenblum F, Rosow CE, Downs JB, Bowie JR, et al: A randomized, double-blind pilot study examining the use of intravenous ondansetron in the prevention of postoperative nausea and vomiting in female inpatients. *J Clin Anesth* 5:30-36, 1993
135. McNeill M.J., Ho E.T., Kenny N.C. Effect of i.v. metoclopramide on gastric emptying after opioid premedication. *Br J Anaesth* 64:450-452, 1990
136. Meakin G, Dingwall AE, Addison GM: Effects of fasting and oral premedication on the pH and volume of gastric aspirate in children. *Br J Anaesth* 59:678-682, 1987
137. Miller M, Wishart HY, Nimmo WS: Gastric contents at induction of anaesthesia. Is a 4-hour fast necessary? *Br J Anaesth* 55:1185-1188, 1983
138. Mirakhur RK: Premedication with atropine or glycopyrrolate in children. Effects on heart rate and rhythm during induction and maintenance of anesthesia. *Anesthesia* 37:1032-1036, 1982
139. Mirakhur RK, Clarke RS, Elliott J, Dundee JW: Atropine and glycopyrronium premedication. A comparison of the effects on cardiac rate and rhythm during induction of anaesthesia. *Anesthesia* 33:906-912, 1978
140. Mircea N, Constantinescu C, Jianu E, Constantinescu N, Daschievici S, Straja D, Ungureanu D, Leoveanu A: Ultrarapid induction. *Acta Anaesthesiol Belg* 36:61-69, 1985
141. Mogensen F, Muller D, Valentin N: Glycopyrrolate during ketamine/diazepam anaesthesia. A double-blind comparison with atropine. *Acta Anaesthesiol Scand* 30:332-336, 1986
142. Morison DH, Dunn GL, Fargas Babjak AM, Moudgil GC, Smedstad K, Woo J: A double-blind comparison of cimetidine and ranitidine as prophylaxis against gastric aspiration syndrome. *Anesth Analg* 61:988-992, 1982
143. Musich J, Walts LF: Pulmonary aspiration after a priming dose of vecuronium. *Anesthesiology* 64:517-519, 1986
144. Newson AJ: The effectiveness and duration of preoperative antacid therapy. *Anaesth Intensive Care* 5:214-217, 1977
145. Nicolson SC, Dorsey AT, Schreiner MS: Shortened preanesthetic fasting interval in pediatric cardiac surgical patients. *Anesth Analg* 74:694-697, 1992
146. Nishimura M, Nakano S, Ueyama H, Uchiyama A, Tashiro C: Effect of preanesthetic rectal famotidine on pH and volume of gastric contents in pediatric outpatients. *J Clin Anesth* 3:207-210, 1991
147. Nishina K, Mikawa K, Maekawa N, Takao Y, Shiga M, Obara H: A comparison of lansoprazole, omeprazole, and ranitidine for reducing preoperative gastric secretion in adult patients undergoing elective surgery. *Anesth Analg* 82:832-836, 1996
148. O'Connor TA, Basak J, Parker S: The effect of three different ranitidine dosage regimens on reducing gastric acidity and volume in ambulatory surgical patients. *Pharmacotherapy* 15:170-175, 1995
149. Oguchi T, Hinohara S, Kashimoto S, Kumazawa T: [A case report of hypoxia in a child after renal transplantation]. *Masui* 38:241-245, 1989
150. Olsson GL, Hall'en B: Pharmacological evacuation of the stomach with metoclopramide. *Acta Anaesthesiol Scand* 26:417-420, 1982
151. Olsson GL, Hallen B, Hamraeus Jonzon K: Aspiration during anaesthesia: a computer-aided study of 185,358 anaesthetics. *Acta Anaesthesiol Scand* 30:84-92, 1986

152. Pan P.H., Moore C.H. Intraoperative antiemetic efficacy of prophylactic ondansetron versus droperidol for cesarean section patients under epidural anesthesia. *Anesth Analg* 83:982-986, 1996
153. Pandit SK, Kothary SP, Pandit UA, Mirakhur RK: Premedication with cimetidine and metoclopramide. Effect on the risk factors of acid aspiration. *Anesthesia* 41:486-492, 1986
154. Papadimitriou L, Kandilorus A, Lakiotis K, Vlontzos M: Protecting against the acid aspiration syndrome in adult patients undergoing emergency surgery. *Hepatogastroenterology* 39:560-561, 1992
155. Patton CM, Jr., Moon MR, Dannemiller FJ: The prophylactic antiemetic effect of droperidol. *Anesth Analg* 53:361-364, 1974
156. Paxton LD, McKay AC, Mirakhur RK: Prevention of nausea and vomiting after day case gynaecological laparoscopy. A comparison of ondansetron, droperidol, metoclopramide and placebo. *Anaesthesia* 50:403-406, 1995
157. Payne K., Ireland P. Plasma glucose levels in the perioperative period in children. *Anaesthesia* 39:868-872, 1984
158. Pendeville PE, Veyckemans F, Van Boven MJ, Steinier JR: Open placebo controlled comparison of the antiemetic effect of droperidol, metoclopramide or a combination of both in pediatric strabismus surgery. *Acta Anaesthesiol Belg* 44:3-10, 1993
159. Penrose BH: Aspiration pneumonitis following ketamine induction for general anesthesia. *Anesth Analg* 51:41-43, 1972
160. Phillips S, Hutchinson S, Davidson T: Preoperative drinking does not affect gastric contents. *Br J Anaesth* 70:6-9, 1993
161. Pond W, Lindsey R, Cowan J: Preoperative ranitidine and metoclopramide [letter]. *Anesth Analg* 66:1202-1203, 1987
162. Rao TL, Madhavareddy S, Chinthagada M, El Etr AA: Metoclopramide and cimetidine to reduce gastric fluid pH and volume. *Anesth Analg* 63:1014-1016, 1984
163. Reissell E, Taskinen MR, Orko R, Lindgren L: Increased volume of gastric contents in diabetic patients undergoing renal transplantation: lack of effect with cisapride. *Acta Anaesthesiol Scand* 36:736-740, 1992
164. Riley RH, Hall JC: Prior gastric surgery and the risk of regurgitation [letter]. *Anesth Analg* 70:570-571, 1990
165. Rodrigo MR, Campbell RC, Chow J, Tong CK, Hui E, Lueveswanij S: Ondansetron for prevention of postoperative nausea and vomiting following minor oral surgery: a double-blind randomized study [see comments]. *Anaesth Intensive Care* 22:576-579, 1994
166. Ross W.T., Nomany G.M. Ranitidine (i.v.) in water increase gastric pH and decrease gastric residual volume in outpatients. *Anesthesiology* 75:A1110-1191
167. Rowbotham D.J., Bamber PA, Nimmo WS: Comparison of the effect of cisapride and metoclopramide on morphine-induced delay in gastric emptying. *Br J Clin Pharm* 26:741-746, 1988
168. Rowbotham D.J., Nimmo WS: Effect of cisapride on morphine-induced delay in gastric emptying. *Br J Anaesth* 59:536-539, 1987
169. Rupreht J, Stienstra R, Dworacek B, Eggels PJ: Methyl atropine bromide versus atropine sulphate. A clinical comparison. *Acta Anaesthesiol Belg* 34:301-307, 1983

170. Russell GN, Yam PC, Tran J, Innes P, Thomas SD, Berry PD, Fox MA, Fabri BM, Jackson M, Weir WI: Gastroesophageal reflux and tracheobronchial contamination after cardiac surgery: should a nasogastric tube be routine? *Anesth Analg* 83:228-232, 1996
171. Salem MR, Wong AY, Fizzotti GF: Efficacy of cricoid pressure in preventing aspiration of gastric contents in paediatric patients. *Br J Anaesth* 44:401-404, 1972
172. Salem MR, Wong AY, Mani M., Bennett E.J., Toyama T. Premedication drugs and gastric juice pH and volume in pediatric patients. *Anesthesiology* 44:216-219, 1976
173. Salmenpera M, Korttila K, Kalima T: Reduction of the risk of acid pulmonary aspiration in anaesthetized patients after cimetidine premedication. *Acta Anaesthesiol Scand* 24:25-30, 1980
174. Salmenpera M, Kuoppamaki R, Salmenpera A: Do anticholinergic agents affect the occurrence of postanaesthetic nausea? *Acta Anaesthesiol Scand* 36:445-448, 1992
175. Sandhar B.K., Goresky G.V., Maltby JR, Shaffer E.A. Effect of oral liquids and ranitidine on gastric fluid volume and pH in children undergoing outpatient surgery. *Anesthesiology* 71:327-330, 1989
176. Sandhar B.K., Goresky G.V., Shaffer E.A., Strunin L: Preoperative fasting in children: how long is enough? *Can J Anaesth* 35:S141-S142, 1988
177. Sandhya, Yaddanapudi LN: Evaluation of two antiemetic agents during outpatient gynaecological surgery. *Singapore Med J* 35:271-273, 1994
178. Satiani B, Bonner JT, Stone HH: Factors influencing intraoperative gastric regurgitation: a prospective random study of nasogastric tube drainage. *Arch Surg* 113:721-723, 1978
179. Scarr M, Maltby JR, Jani K, Sutherland LR: Volume and acidity of residual gastric fluid after oral fluid ingestion before elective ambulatory surgery. *Can Med Assoc J* 141:1151-1154, 1989
180. Schmidt J.F., Jorgensen B.C. The effect of metoclopramide on gastric contents after perioperative ingestion of sodium citrate. *Anesth Analg* 63:841-843, 1984
181. Schreiner MS, Triebwasser A, Keon TP: Ingestion of liquids compared with preoperative fasting in pediatric outpatients [see comments]. *Anesthesiology* 72:593-597, 1990
182. Sellick B.A. Cricoid pressure to control regurgitation of stomach contents during induction of anesthesia. *Lancet* 2:404-406, 1961
183. Sengupta A, Gupta PK, Pandey K: Investigation of glycopyrrolate as a premedicant drug. *Br J Anaesth* 52:513-516, 1980
184. Shorten GD, Alfillé PH, Gliklich RE: Airway obstruction following application of cricoid pressure. *J Clin Anesth* 3:403-405, 1991
185. Sjovall S, Kanto J, Iisalo E, Kangas L, Mansikka M, Pihlajamaki K: Use of atropine in connection with oral midazolam premedication. *Int J Clin Pharmacol Ther* 22:1984
186. Sladen A, Zanca P, Hadnott WH: Aspiration pneumonitis--the sequelae. *Chest* 59:448-450, 1971
187. Solanki DR, Suresh M, Ethridge HC: The effects of intravenous cimetidine and metoclopramide on gastric volume and pH. *Anesth Analg* 63:599-602, 1984
188. Somboonviboon W, Kijmaphatrakul W: Blood glucose concentration in pediatric outpatient surgery. *J Med Assoc Thai* 79:236-239, 1996

189. Splinter WM, Baxter MR, Gould HM, Hall LE, MacNeill HB, Roberts DJ, Komocar L: Oral ondansetron decreases vomiting after tonsillectomy in children [see comments]. *Can J Anaesth* 42:277-280, 1995
190. Splinter WM, Rhine EJ, Roberts DW, Baxter MR, Gould HM, Hall LE, MacNeill HB: Ondansetron is a better prophylactic antiemetic than droperidol for tonsillectomy in children. *Can J Anaesth* 42:848-851, 1995
191. Splinter WM, Schaefer JD: Unlimited clear fluid ingestion two hours before surgery in children does not effect volume or pH of stomach contents. *Anaes Intens Care* 18:522-526, 1990
192. Splinter WM, Schaefer JD: Ingestion of clear fluids is safe for adolescents up to 3 h before anaesthesia. *Br J Anaesth* 66:48-52, 1991
193. Splinter WM, Schaefer JD, Zunder I.H. Clear fluids three hours before surgery do not effect the gastric contents of children. *Can J Anaesth* 37:4981990
194. Splinter WM, Schneider M.E., Schaefer JD: Unrestricted clear fluid ingestion three hours before anesthesia is safe for adolescents. *Anesth Analg* 70:S3871990
195. Splinter WM, Stewart J.A., Muir J.G. The effect of preoperative apple juice on gastric contents, thirst, and hunger in children. *Can J Anaesth* 36:55-58, 1989
196. Splinter WM, Stewart J.A., Muir J.G. Large volumes of apple juice preoperative do not effect gastric pH and volume in children. *Can J Anaesth* 37:36-39, 1990
197. Stirt JA, Lewenstein LN: Circle system failure induced by gastric suction. *Anaesth Intensive Care* 9:161-162, 1981
198. Stock JG, Sutherland AD: The role of H<sub>2</sub> receptor antagonist premedication in pregnant day care patients. *Can Anaesth Soc J* 32:463-467, 1985
199. Stoelting RK: Gastric fluid pH in patients receiving cimetidine. *Anesth Analg* 57:675-677, 1978
200. Stoelting RK: Responses to atropine, glycopyrrolate, and riopan on gastric fluid pH and volume in adult patients. *Anesthesiology* 48:367-369, 1978
201. Stoelting RK: Gastric fluid volume and pH after fentanyl, enflurane, or halothane-nitrous oxide anesthesia with or without atropine or glycopyrrolate. *Anesth Analg* 59:287-290, 1980
202. Strain JD, Moore EE, Markovich VJ, Van Duzer Moore S: Cimetidine for the prophylaxis of potential gastric acid aspiration pneumonitis in trauma patients. *J Trauma* 21:49-51, 1981
203. Sutherland AD, Maltby JR, Sale JP, Reid CRG: The effect of preoperative oral fluid and ranitidine on gastric fluid volume and pH. *Can J Anaesth* 34:117-121, 1987
204. Swayne P, Greenslade GL: Emergency intubation through the laryngeal mask airway. The effective application of cricoid pressure. *Anaesthesia* 49:696-697, 1994
205. Thomas DK: Hypoglycaemia in children before operation: its incidence and prevention. *Br J Anaesth* 46:66-68, 1974
206. Thomas JL: Awake intubation. Indications, techniques and a review of 25 patients. *Anaesthesia* 24:28-35, 1969
207. Tinstman TC, Dines DE, Arms RA: Postoperative aspiration pneumonia. *Surg Clin North Am* 53:859-862, 1973
208. Tiret L., Desmonts J.M., Hatton F., Vourc'h G. Complications associated with anaesthesia: a prospective study in France. *Can Anaesth Soc J* 33:336-344, 1986

209. Tobias JD, Atwood R, Lowe S, Holcomb GW, III: Anesthetic considerations in the child with Gaucher disease. *J Clin Anesth* 5:150-153, 1993
210. Tornetta FJ: Clinical studies with the new antiemetic, metoclopramide. *Anesth Analg* 48:198-204, 1969
211. Tr'epanier CA, Isabel L: Perioperative gastric aspiration increases postoperative nausea and vomiting in outpatients. *Can J Anaesth* 40:325-328, 1993
212. Tryba M, Wruck G, Thole H, Zenz M: The use of roxatidine acetate in fasting patients prior to induction of anaesthesia as prophylaxis against the acid aspiration syndrome. *Drugs* 35:20-24, 1988
213. Tryba M, Yildiz F, Kuhn K, Dziuba M, Zenz M: Rectal and oral cimetidine for prophylaxis of aspiration pneumonitis in paediatric anaesthesia. *Acta Anaesthesiol Scand* 27:328-330, 1983
214. Turndorf H, Rodis ID, Clark TS: "Silent" regurgitation during general anesthesia. *Anesth Analg* 53:700-703, 1974
215. van der Walt JH, Carter JA: The effect of different pre-operative feeding regimens on plasma glucose and gastric volume and pH in infancy. *Anaesth Intensive Care* 14:352-359, 1986
216. van der Walt JH, Foate JA, Murrell D, Jacob R, Bentley M: A study of preoperative fasting in infants aged less than three months. *Anaesth Intensive Care* 18:527-531, 1990
217. Vaughan R.W., Bauer S., Wise L. Volume and pH of gastric juice in obese patients. *Anesthesiology* 43:686-689, 1975
218. Verheecke G, Troch E: Oral droperidol for premedication in children. *Acta Anaesthesiol Belg* 36:421-426, 1985
219. Viegas OJ, Ravindran RS, Shumacker CA: Gastric fluid pH in patients receiving sodium citrate. *Anesth Analg* 60:521-523, 1981
220. Vincent RD, Jr., McNeil TJ, Spaid CL, MacMahon FR, Maxwell SJ, Brenner JS, Schryer VL: Does 360 ml of apple juice ingested before elective surgery worsen gastric volume and acidity in patients given acid aspiration prophylaxis? *J Clin Anesth* 3:285-289, 1991
221. Wang LP, Hagerdal M: Reported anaesthetic complications during an 11-year period. A retrospective study. *Acta Anaesthesiol Scand* 36:234-240, 1992
222. Warner MA, Warner ME, Weber JG: Clinical significance of pulmonary aspiration during the perioperative period. *Anesthesiology* 78:56-62, 1993
223. Weber L, Hirshman CA: Cimetidine for prophylaxis of aspiration pneumonitis: comparison of intramuscular and oral dosage schedules. *Anesth Analg* 58:426-427, 1979
224. Weiss W.A. Regurgitation and aspiration of gastric contents during inhalation anesthesia. *Anesthesiology* 11:102-109, 1950
225. White FA, Clark RB, Thompson DS: Preoperative oral antacid therapy for patients requiring emergency surgery. *South Med J* 71:177-179, 1978
226. Wilkins RA, De Lacey GJ, Flor R, Taylor S: Radiology in Mendelson's syndrome. *Clin Radiol* 27:81-85, 1976
227. Wilkinson DJ: Contac 400: a possible cause of aspiration under anaesthesia. *Hum Toxicol* 6:529-531, 1987

228. Williams JG, Strunin L: Preoperative intramuscular ranitidine and cimetidine: double blind comparison trial, effect on gastric pH and volume. *Anaesthesia* 40:242-245, 1985
229. Wilson SL, Mantena NR, Halverson JD: Effects of atropine, glycopyrrolate, and cimetidine on gastric secretions in morbidly obese patients. *Anesth Analg* 60:37-40, 1981
230. Wright DJ, Pandya A: Smoking and gastric juice volume in outpatients. *Can Anaesth Soc J* 26:328-330, 1979
231. Wrobel J, Koh TC, Saunders JM: Sodium citrate: an alternative antacid for prophylaxis against aspiration pneumonitis. *Anaesth Intensive Care* 10:116-119, 1982
232. Yorozu T, Takino Y, Shimada M, Sumida Y, Hayashi H: [Anesthetic management of a patient with Conradi's syndrome (chondrodysplasia punctata)-a case report]. *Masui* 38:1092-1095, 1989