

Question n°5

La prévention du risque allergique peut-elle être assurée par une médication préanesthésique ?

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REFERENCES

1. Haberer JP, Chartier C. Premédication. *Encycl Med Chir (Paris, France), Anesthésie-Réanimation, 36375 A²⁰, 12-1989, 12 p.* [NP V]
2. Laxenaire MC et le groupe d'études des réactions anaphylactoïdes peranesthésiques. *Epidémiologie des réactions anaphylactoïdes peranesthésiques. Quatrième enquête multicentrique (Juillet 1994-décembre 1996). Ann Fr Anesth Réanim 1999;18:796-809.* [NP III]
3. Lorenz W, Doenicke A, Schöning B, Neugebauer E. The role of histamine in adverse reactions to intravenous agents. In: Thornton JA, Ed. *Adverse reactions of anaesthetic drugs.* Amsterdam : Elsevier, 1981, p 169-238.
4. Kaliner M, Sigler R, Summers R, Shelhamer JH. Effects of infused histamine: analysis of the effects of H₁ and H₂ histamine receptor antagonists on cardiovascular and pulmonary responses. *J Allergy Clin Immunol 1981;68:365-71.* [NP III]
5. Kaliner M, Shelhamer JH, Ottesen EA. Effects of infused histamine: correlation of plasma histamine levels and symptoms. *J Allergy Clin Immunol 1982;69:283-9.* [NP III]
6. Vigorito C, Russo P, Picotti GB, Chiariello M, Poto S, Marone G. Cardiovascular effects of histamine infusion in man. *J Cardiovasc Pharmacol 1983;5:531-7.* [NP III]
7. Dulabh R, Vickers MR. The effects of H₂ receptor antagonists on anaphylaxis in the guinea-pig. *Agents Actions 1978;8:559-65.* [NP III]
8. Schöning B, Lorenz W, Doenicke A. Prophylaxis of anaphylactoid reactions to a polypeptidal plasma substitute by H₁-plus H₂ receptor antagonists: synopsis of three randomized controlled trials. *Klin Wochenschr 1982;60:1048-55.* [NP II]
9. Halonen M, Lohman IC, Palmer JD. The role of histamine in the physiologic alterations of IgE anaphylaxis in the rabbit. *Immunopharmacol 1984;7:77-87.* [NP III]
10. Mehr EH, Lindeman KS, Hirshman CA. Airway constriction following atracurium is due to histamine release [abstract]. *Anesthesiology 1991;75 (Suppl):A974.* [NP III]

11. Dewachter P, Stein B, Saunier CG, Peslin R, Laxenaire MC. Les récepteurs H₂ ne semblent pas impliqués dans le bronchospasme à l'histamine chez le lapin [résumé]. *Ann Fr Anesth Réanim* 1992;11(Suppl):R17. [NP III]
12. Lorenz W, Doenicke A, Schoning B, Mamorski J, Weber D, Hinterlang E, et al. H₁ + H₂ receptor antagonists for premedication in anaesthesia and surgery: a critical view based on randomized clinical trials with Haemacel and various antiallergic drugs. *Agents Actions* 1980;10:114-24. [NP III]
13. Philbin DM, Moss J, Akins CW, Rosow CE, Kono K, Schneider RC, et al. The use of H₁ and H₂ histamine antagonists, with morphine anesthesia: a double-blind study. *Anesthesiology* 1981;55:292-6. [NP II]
14. Doenicke A, Lorenz W. Histamine release in anaesthesia and surgery. Premedication with H₁- and H₂- receptor antagonists : Indications, benefits and possible problems. *Klin Wochenschr* 1982;60:1039-45. [NP V]
15. Philbin DM, Moss J, Rosow CE, Akins CW, Rosenberger JL. Histamine release with intravenous narcotics: protective effects of H₁ and H₂-receptor antagonists. *Klin Wochenschr* 1982;60:1056-59. [NP II]
16. Brick A, Tashkin DP, Gong H, Dauphinee B, Lee E. Effect of cetirizine, a new histamine H₁ antagonist on airway dynamics and responsiveness to inhaled histamine in mild asthma. *J Allergy Clin Immunol* 1987;80:51-6. [NP III]
17. Kambam J, Meszaros R, Merrill W, Stewart J, Smith BE, Bender H. Prophylactic administration of H₁ and H₂ receptor blockers in the prevention of protamine related haemodynamic effects. *Can J Anaesth* 1990;37:420-2. [NP II]
18. Lorenz W, Duda D, Dick W, Sitter H, Doenicke A, Black A, et al. Incidence and clinical importance of perioperative histamine release randomised study of volume loading and antihistamines after induction of anaesthesia. *Lancet* 1994;343:933-40. [NP II]
19. Doenicke A, Moss J, Lorenz W, Mayer M, Rau J, Jedrzejewski A, Ostwald P. Effects of oral antihistamine premedication on mivacurium-induced histamine release and side effects. *Br J Anaesth* 1996;77:421-3. [NP II]
20. Baroody FM, Naclerio RM. Antiallergic effects of H₁-receptor antagonists. *Allergy* 2000;55:17-27. [NP V]
21. Craft TM. Torsades de pointes after astemizole overdose. *Br Med J* 1986;292:660. [NP V]
22. Bishop RO, Gaudry PL. Prolonged Q-T interval following astemizole overdose. *Arch Emerg Med* 1989;6:63-5. [NP V]
23. Wiley JF, Gelber ML, Henretig FM, Wiley CC, Sandhu S, Loisel J. Cardiotoxic effects of astemizole overdose in children. *J Pediatr* 1992;120:799-802. [NP V]
24. Snook J, Boothman-Burrell D, Watkins J, Colin-Jones D. Torsades de pointes ventricular tachycardia associated with astemizole overdose. *Br J Clin Pract* 1988;42:257-9. [NP V]

25. Leor J, Harman M, Rabinowitz B, Mozes B. Giant U waves and associated ventricular tachycardia complicating astemizole overdose: successful therapy with intravenous magnesium. *Am J Med* 1991, 91:94-7. [NP V]
26. Warin RP. Torsades de pointes complicating treatment with terfenadine. *Br Med J* 1991;303:58. [NP V]
27. Simons FE, Kesselman MS, Giddins NG, Pelech AN, Simons KJ. Astemizole-induced torsades de pointes [letter]. *Lancet* 1988;2:624. [NP V]
28. Monahan BP, Ferguson CL, Killeavy ES, Lloyd BK, Troy J, Cantilena LR. Torsades de pointes occurring in association with terfenadine use. *JAMA* 1990;264:2788-90. [NP V]
29. Mac Connell TJ, Stanners AJ. Torsades de pointes complicating treatment with terfenadine. *Br Med J* 1991;302:1469. [NP V]
30. Davies AJ, Harindra V, Mc Ewan A, Ghose RR. Cardiotoxic effect with convulsions in terfenadine overdose. *Br Med J* 1989;298:325. [NP V]
31. Hollister LE. Hydroxyzine hydrochloride: possible adverse cardiac interactions. *Psychopharmacology communications* 1975;1:61-5. [NP V]
32. Felix SB, Baumann G, Niemczyk M, Hashemi T, Ochsenfeld G, Ahmad Z, et al. Effects of histamine H₁ and H₂ receptor antagonists on cardiovascular function during systemic anaphylaxis in guinea pigs. *Agents Actions* 1991;32:245-52. [NP III]
33. Jean-Pastor MJ, Caron J, Ollagnier M. XIIes Journées de l'Association française des centres régionaux de pharmacovigilance. *Concours Médical* 1992;114:3329-34. [NP V]
34. Laxenaire MC et le Groupe d'étude des réactions anaphylactoïdes peranesthésiques. Substances responsables des chocs anaphylactoïdes peranesthésiques. Troisième enquête multicentrique française (1991-1994). *Ann Fr Anesth Réanim* 1996;15:1211-8. [NP III]
35. Douglas WW. Histamine and 5-hydroxytryptamine (serotonin) and their antagonists. In: Gilman A, Goodman L, Rall T, Murad F, Eds. *The pharmacologic basis of therapeutics*. 7th ed. New York : Macmillan, 1987:605-38. [NP V]
36. Portier MM, Richet C. De l'action anaphylactique de certains venins. *Comptes-rendus hebdomadaires des séances et mémoires de la société de Biologie, séance du 15 février*. Vol 54. Paris : Masson ;1902. p 170-2. [NP III]
37. Summers R, Sigler R, Shelhamer JH, Kaliner M. Effects of infused histamine on asthmatic and normal subjects: comparison of skin test responses. *J Allergy Clin Immunol* 1981;67:456-64. [NP III]
38. Ting S, Rauls DO, Reiman BEF. Inhibitory effect of hydroxyzine on antigen-induced histamine release in vivo. *J Allergy Clin Immunol* 1985;75:63-6. [NP III]
39. Gendreau-Reid L, Simons KJ, Simons FER. Comparison of the suppressive effect of astemizole, terfenadine, and hydroxyzine on histamine-induced wheals and flares in humans. *J Allergy Clin Immunol* 1986;77:335-40. [NP III]

40. Michel L, De Vos C, Rihoux JP, Burtin C, Benveniste J, Dubertret L. Inhibitory effect of oral cetirizine on in vivo antigen-induced histamine and PAF-aceter release and eosinophil recruitment in human skin. *J Allergy Clin Immunol* 1988;82:101-9. [NP III]
41. Bernady A, Taytard A, Tunon de Lara JM. IgE spécifiques et histaminolibération. *Rev Fr Allergol* 1996;36:884-8. [NP V]
42. Moneret-Vautrin DA, Laxenaire MC, Mouton C, Widmer S, Pupil P. Modification de la réactivité cutanée dans l'anaphylaxie aux myorelaxants et hypnotiques après administration d'anti H₁, d'anti H₂ et de tritoqualine. *Ann Fr Anesth Réanim* 1985 ;4:225-30. [NP III]
43. Leynadier F, Pujade-Lauraine MD, Sirot S, Dry J. Effets antihistaminiques des psychotropes. *Presse Med* 1985;14:789-90. [NP V]
44. Fisher M, More DG. The epidemiology and clinical features of anaphylactic reactions in anaesthesia. *Anaesth Intensive Care* 1981;9:226-34. [NP III]
45. Smith MB, Hofmann VC. Anaphylactoid reaction to chymopapain. *Anaesthesia* 1989;44:767-9. [NP V]
46. Laxenaire MC, Mouton C, Frederic A, Viry-Babel F, Bouchon Y. Chocs anaphylactiques après levée de garrot en chirurgie orthopédique. *Ann Fr Anesth Réanim* 1996 ;15 :179-84. [NP V]
47. Blas M, Briesacher KS, Lobato EB. Bacitracin irrigation : a cause of anaphylaxis in the operating room. *Anesth Analg* 2000;91:1027-8. [NP V]
48. Mitsuhata H, Horiguchi Y, Saitoh J, Saitoh K, Fukuda H, Hirabayasi Y, et al. An anaphylactic reaction to topical fibrin glue. *Anesthesiology* 1994;81:1074-7. [NP V]
49. Dietrich W, Spath P, Ebell A, Richter JA. Prevalence of anaphylactic reactions to aprotinin: analysis of two hundred forty-eight reexposures to aprotinin in heart operations. *J Thorac Cardiovasc Surg* 1997;113:194-201. [NP V]
50. Kanny G, Maria Y, Mentre B, Moneret-Vautrin DA. Case report: recurrent anaphylactic shock to radiographic contrast media. Evidence supporting an exceptional IgE-mediated reaction. *Allerg Immunol* 1993;25:425-30. [NP V]
51. Greenberger PA, Patterson R, Tapio CM. Prophylaxis against repeated radiocontrast media in 857 cases. *Arch Int Med* 1985;145:2197-200. [NP IV]
52. Thomas M, Koshi T, Korah I. Adverse reactions to radiocontrast media in an Indian population. *Br J Radiol* 1999;72:648-52. [NP IV]
53. Dewachter P, Mouton-Faivre C, Felden F. Allergy and contrast media. *Allergy* 2001;56:250-1. [NP V]
54. Dewachter P, Mouton-Faivre C. Réactions sévères avec les produits de contraste iodés : l'anaphylaxie est-elle responsable ? *J Radiol* 2001 ;82 :973-7. [NP V]

55. Freed KS, Leder RA, Alexander C, DeLong DM, Kliewer MA. Breakthrough adverse reactions to low-osmolar contrast media after steroid premedication. *AJR* 2001;176:1389-92. [NP IV]
56. Greer IA, Fellows K. Anaphylactoid reaction to ranitidine in labour. *Br J Clin Pract* 1990;44:78. [NP V]
57. Barry JE, Madan R, Hewitt PB. Anaphylactoid reaction to ranitidine in an obstetric patient. *Anaesthesia* 1992;47:360-1. [NP V]
58. Powell JA, Maycock EJ. Anaphylactoid reaction to ranitidine in an obstetric patient. *Anaesth Intensive Care* 1993;21:702-3. [NP V]
59. Bossi A, Romeo G, Pezzoli A. Side effects, structure and H₂-receptor antagonists. [letter]. *Lancet* 1992;336:1366.
60. Lazaro M, Compaired JA, De La Hoz B, Igea JM, Marcos C, Davila I, et al. Anaphylactic reaction to ranitidine. *Allergy* 1993;48:385-7. [NP V]
61. Mira-Perceval JL, Ortiz JL, Sarrio F, Miralles JC, Hernandez J, Negro-Alvarez JM, et al. Nizatidine anaphylaxis. *J Allergy Clin Immunol* 1996;97:855-6. [NP V]
62. Picardo M, Santucci B. Urticaria from ranitidine. *Contact Dermatitis* 1983;9:327. [NPV]
63. Felix SB, Baumann G, Helmus S, Sattelberger U. The role of histamine in cardiac anaphylaxis; characterization of histaminergic H₁ and H₂ receptor effects. *Basic Res Cardiol* 1988;83:531-9.
64. Levi R, Zavec JH. Acceleration of idioventricular rhythms by histamine in guinea pig hearts. *Circ Res* 1979;44:847-55. [NP V]
65. Iberti TJ, Paluch TA, Helmer L, Murgolo VA, Benjamin E. The hemodynamic effects of intravenous cimetidine in intensive care unit patients: a double-blind, prospective study. *Anesthesiology* 1986;64:87-9. [NP III]
66. Kiowski W, Frei A. Bolus injection of cimetidine and hypotension in patients in the intensive care unit. Incidence and mechanisms. *Arch Intern Med* 1987;147:153-6. [NP III]
67. Smith CL, Bardgett DM, Hunter JM. Haemodynamic effects of the i.v. administration of cimetidine or ranitidine in the critically ill patient. A double-blind prospective study. *Br J Anaesth* 1987;59:1397-402. [NP III]
68. Coursin DB, Farin-Rusk C, Springman SR, Goelzer SL. The hemodynamic effects of intravenous cimetidine versus ranitidine in intensive care unit patients: a double-blind prospective cross-over study. *Anesthesiology* 1988 ; 69:975-8. [NP III]
69. Omote K, Namiki A, Nishikawa T, Hagiwara T, Iwasaki H, Tsuchida H. Haemodynamic effects of famotidine and cimetidine in critically ill patients. *Acta Anaesthesiol Scand* 1990;34:576-8. [NP III]
70. Cohen J, Weetman AP, Dargie HJ, Krikler DM. Life-threatening arrhythmias and intravenous cimetidine. *Br Med J* 1979;2:768. [NP V]

71. Lineberger AS, Sprague DH, Battaglini JW. Sinus arrest associated with cimetidine. *Anesth Analg* 1985;64:554-6. [NP V]
72. Cabanie M, Godfraind T. The role of histamine in the cardiovascular system. *Drugs Exp Clin Res* 1988;14:141-7. [NP V]
73. Lichtenstein LM, Gillespie E. Inhibition of histamine release by histamine controlled by H₂ receptor. *Nature* 1973;244:287-8. [NP V]
74. Allouche G, Santais MC, Foussard C, Ruff F, Parrot JL. Role of H₂-receptor antagonists in the feedback of histamine. 5th Annual meeting of the European branch of the histamine Club, Paris 6-8 mai 1976. [NP V]
75. Ting S, Zweiman B, Lavker R, Dunsky EH. Histamine suppression of in vivo eosinophil accumulation and histamine release in human allergic reactions. *J Allergy Clin Immunol* 1981;68:65-71. [NP V]
76. Shaw RG, Mashford ML, Desmond PV. Cardiac arrest after intravenous injection of cimetidine. *Med J Aust* 1980;2:629-30. [NP V]
77. Parkin JV, Ackroyd EB, Glyckman S, Hobsley M, Lorenz W. Release of histamine by H₂ receptor antagonists. *Lancet* 1982;938-9. [NP V]
78. Doenicke A, Moss J, Lorenz W, Hoernecke R, Gottardis M. Are hypotension and rash after atracurium really caused by histamine release? *Anesth Analg* 1994;78:967-72.
79. Moss J. Use of prophylactic combined H₁ and H₂ antagonists reduced mortality in chymopapain anaphylaxis. *Ann Fr Anesth Réanim* 1985;4:221-4. [NP IV]
80. Marshall GD, Lieberman P. Comparison of three pretreatment protocols to prevent anaphylactoid reactions to radiocontrast media. *Ann Allergy* 1991;67:70-4. [NP IV]
81. Dahl JB. Antihistamine prophylaxis and general anaesthesia (comment). *Lancet* 1994;343:929-30. [NP V]
82. Ring J, Messmer K. Incidence and severity of anaphylactoid reactions to colloid volume substitutes. *Lancet* 1977 ; i : 466-9. [NP III]
83. Michel F, Grosshans H, Rondelet B. Choc anaphylactique gravissime après induction anesthésique. *Ann Fr Anesth Réanim* 2000 ;19 :691-2. [NP V]
84. Kwitten PL, Becker J, Oyefara B, Danziger R, Pawlowski NA, Schweinberg S. Latex hypersensitivity reactions despite prophylaxis. *Allergy Proc* 1992;13:123-7. [NP V]
85. Setlock MA, Cotter TP, Rosner D. Latex allergy: failure of prophylaxis to prevent severe reaction. *Anesth Analg* 1993;76:650-2. [NP V]
86. Vassallo SA, Thurston TA, Kim SH, Todres ID. Allergic reaction to latex from stopper of a medication vial. *Anesth Analg* 1995;80:1057-8. [NP V]
87. Patterson LJ, Milne B. Latex anaphylaxis causing heart block: role of ranitidine. *Can J Anesth* 1999;46:776-8. [NP V]

88. Bircher AJ, Hedin H, Berglund A. Probable grade IV dextran-induced anaphylactic reaction despite hapten inhibition. *J Allergy Clin Immunol* 1995;95:633-4. [NP V]
89. Cohen DM, Norberto J, Cartabuke R, Ryu G. Severe anaphylactic reaction to aprotinin. *Ann Thorac Surg* 1999;67:837-8. [NP V]
90. Laxenaire MC, Dewachter P, Pecquet C. Le risque allergique de l'aprotinine. *Ann Fr Anesth Réanim* 2000 ;19 :96-104. [NP V]
91. Lasser EC, Berry CC, Talner LB, Santini LC, Lang EK, Gerber FH, et al. Pretreatment with corticosteroids to alleviate reactions to intravenous contrast material. *N Engl J Med* 1987;317:845-9. [NP IV]
92. Richter W. Hapten inhibition of passive antidextran anaphylaxis in guinea pigs. Role of molecular size in anaphylactogenicity and precipitability of dextran fractions. *Int Arch Allergy* 1971;41:826-44. [NP III]
93. Laxenaire MC, Peignier C, Audibert G, Guéant JL. Substituts colloïdaux du plasma. In: Laxenaire MC, Moneret-Vautrin DA, Eds. *Le risque allergique en anesthésie-réanimation*. Paris : Masson ;1990. p 72-81. [NP V]
94. Ljungström KG. Safety of dextran in relation to other colloids. Ten years experience with hapten inhibition. *Infusionsther Transfusionsmed* 1993;20:206-10. [NP III]
95. Hedin H, Ljungstrom KG. Prevention of dextran anaphylaxis. Ten years experience with hapten dextran. *Int Arch Allergy Immunol* 1997 ;113 :358-59. [NP III]
96. Berg EM, Fasting S, Sellevold OFM. Serious complications with dextran-70 despite hapten prophylaxis. *Anaesthesia* 1991;46:1033-5. [NP V]
97. Laxenaire MC, Mertes PM and Groupe d'études des réactions anaphylactoides peranesthésiques. Anaphylaxis during anaesthesia. Results of a two-year survey in France. *Br J Anaesth* 2001;87:549-58. [NP III]
98. Baldo BA, Fisher MM. Substituted ammonium ions as allergenic determinants in drug allergy. *Nature* 1983;306:262-4. [NP V]
99. Baldo BA, Harle DG. Drug allergenic determinants. In : Baldo BA, Ed. *Molecular approaches to the study of allergens*. Basel : Karger 1990 ; Monogr Allergy, 28:11-51. [NP V]
100. Vervloet D, Arnaud A, Senft M, Dor P, Didier A, Bongrand P, et al. Anaphylactic reactions to suxamethonium : prevention of mediator release by choline. *J Allergy Clin Immunol* 1985;76:222-5. [NP V]
101. Thomas H, Eledjam JJ, Macheboeuf M, d'Athis F, Mares P, Bousquet J. Rapid pre-operative immunotherapy in a patient allergic to muscle relaxants. *Eur J Anaesthesiol* 1988;5:385-9. [NP V]
102. Moneret-Vautrin DA, Motin J, Mata E, Guéant JL, Kanny G, Widmer S, et al. Preventing muscle relaxants anaphylaxis with monovalent haptens. A preliminary study. *Ann Fr Anesth Réanim* 1993;12:190-2. [NP III]

103. Moneret-Vautrin DA, Kanny G, Guéant JL, Widmer S, Laxenaire MC. Prevention by monovalent haptens of IgE-dependant leucocyte histamine release to muscle relaxants. *Int Arch Allergy Immunol* 1995;107:172-5. [NP III]
104. Bord F. Utilisation d'un haptène monovalent injectable type citicholine dans l'inhibition de la réactivité cutanée allergique aux myorelaxants. A propos de deux cas. *Rev Fr Allergol* 1994;34:145-9. [NP V]
105. Watkins J. Histamine release and atracurium. *Br J Anaesth* 1986; 19S-22S.
106. Savarese JJ, Ali HH, Basta SJ, Scott RPF, Embree PB, Wastila WB et al. The cardiovascular effects of mivacurium chloride (BW B1090U) in patients receiving nitrous oxide-opiate-barbiturate anesthesia. *Anesthesiology* 1989;70:386-94. [NP IV]
107. Basta SJ. Modulation of histamine release by neuromuscular blocking drugs. *Curr Opin Anaesthesiol* 1992;5:572-6.
108. Moss J. Muscle relaxants and histamine release. *Acta Anaesthesiol Scand* 1995;106 Suppl:7-12.
109. Fisher MM, Baldo BA. Anaphylaxis during anaesthesia: Currents aspects of diagnosis and prevention. *Eur J Anaesthesiol* 1994;11:263-84. [NP V]
110. Cremer R, Kleine-Diepenbruck U, Hoppe A, Bläker F. Latex allergy in spina bifida patients-prevention by primary prophylaxis. *Allergy* 1998;53:709-11. [NP III]
111. Task force on allergic reaction to latex. American academy of allergy and immunology. Committee report. *J Allergy Clin Immunol* 1993;92:16-8. [NP V]
112. Mertes PM, Laxenaire MC. Allergic reactions occurring during anaesthesia. Review. *Eur J Anaesthesiol* 2001 : in press.
113. Barbara J, Chabane MH, Leynadier F, Girard F. Retention of airborne latex particles by a bacterial and viral filter used in anaesthesia. *Anaesthesia* 2000;55: 1-5. [NP III]
114. Guéant JL, Mata-Bermejo E, Masson C, Moneret-Vautrin DA, Laxenaire MC. Non specific interactions in anti-agent IgE-RIA to anesthetic agents. *Ann Fr Anesth Réanim* 1993;12:141-6. [NP V]
115. Aimone-Gastin I, Guéant JL, Laxenaire MC, Moneret-Vautrin DA. Pathogenesis of allergic reactions to anaesthetic drugs. *Int J Immunopathol Pharmacol* 1997 ;10 :193-6. [NP V]
116. Laxenaire MC, Mata-Bermejo E, Moneret-Vautrin DA, Guéant JL. Life-threatening anaphylactoid reactions to propofol (Diprivan). *Anesthesiology* 1992;77:275-80. [NP V]
117. Guéant JL, Mata E, Masson C, Gérard P, Moneret-Vautrin DA, Mouton-Faivre C, et al. Non-specific cross-reactivity of hydrophobic serum IgE to hydrophobic drugs. *Mol Immunol* 1995;32:259-66. [NP V]
118. Martinelli L, Maurelli M, Vigano M. Aprotinin in staged heart transplantation: anaphylactic potential of repeated exposure. *Ann Thorac Surg* 1996;61:1288-9. [NP V]

119. Brinkmann T, Korfer R, Wenzel HR, Tschesche H, Kleesiek K. Strong cross-reaction to human anti-aprotinin antibodies from heart transplant patient with (Arg¹⁵) aprotinin. *Immunopharmacol* 1997;35:221-8. [NP V]
120. Ryckwaert Y, Barthelet Y, Bonnet Boyer MC, Capdevilla X, d'Athis F. Choc anaphylactique après dose-test d'aprotinine en chirurgie orthopédique pédiatrique. *Ann Fr Anesth Réanim* 1999;18:904-8. [NP V]
121. Pecquet C, Autegarden JE, Kural-Menasche S, Perez G, Menasche P, Sanson-Lepors MJ, et al. Réaction anaphylactique à l'aprotinine : intérêt diagnostique des tests intradermiques. *Ann Fr Anesth Réanim* 2000 ;19 :755-7. [NP V]
122. Mertes PM, Laxenaire MC. Anaphylaxis during general anaesthesia. Prevention and management. *CNS Drugs* 2000;14:115-33. [NP V]
123. Fisher MM, Baldo BA. Mast cell tryptase in anaesthetic anaphylactoid reactions. *Br J Anaesth* 1998;80:26-9. [NP V]
124. Société française d'anesthésie et de réanimation. Recommandations pour la pratique de l'antibioprophylaxie en chirurgie. Actualisation 1999. *Ann Fr Anesth Réanim* 1999 ;18 :fi75-85. [NP V]
125. Laxenaire MC, Moneret-Vautrin DA. Allergy and anaesthesia. *Curr Opin Anaesthesiol* 1992;5:436-41. [NP V]
126. Sullivan TJ. Lung biology in health and disease: the mast cell in health and disease. *Anaphylaxis*. 1993;62:529-43. [NP V]
127. AAAI Board of directors. The use of epinephrine in the treatment of anaphylaxis. *J Allergy Clin Immunol* 1994;94:666-8. [NP V]
128. Mc Kinnon RP. Allergic reactions during anaesthesia. *Curr Opin Anaesthesiol* 1996;9:267-70. [NP V]
129. Holzman RS. Clinical management of latex-allergic children. *Anesth Analg* 1997;85:529-33. [NP IV]
130. Bouaziz H, Laxenaire MC. Anaesthesia for the allergic patient. *Curr Opin Anaesthesiol* 1998;11:339-44. [NP V]