

References

References

1. Abd-Allah, M.A., Foda, Y.H., et al.: Treatment of reduce total vicine in Egyptian fava bean (Giza 2 variety). *Plant Foods Hum. Nutr.* **38**: 201,1988.
2. Allen, D.W., Johnson, G.J., et al.: Membrane polypeptide aggregates in glucose-6-phosphate dehydrogenase deficient and in vitro aged red blood cells. *J. Lab. Clin. Med.* **91**: 321, 1978.
3. Allison, A.C.: Glucose-6-phosphate dehydrogenase deficiency in red blood cells of East Africans. *Nature* **186**: 531, 1960.
4. Alving A. Drugs used in malaria and their side effects. Illinois United Fruit Company (Med Paper) 34-41, 1952.
5. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. *Guidelines for Perinatal Care*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics, 108-109, 1994.
6. American Academy of Pediatrics, Provisional Committee for Quality Improvement and Subcommittee on Hyperbilirubinemia. Practice parameter: Management of hyperbilirubinemia in the healthy term newborn. *Pediatrics*, **94**: 558-565, 1994.
7. Antonenkov, V.D.: Dehydrogenases of The pentose phosphate pathway in rat liver peroxisomes. *Eur. J. Biochem.* **183**:75, 1989.

8. Arese, P., and De Flora, A.: Pathophysiology of hemolysis in glucose-6-phosphate dehydrogenase deficiency. *Semin. Hematol.* **27**:1, 1990.
9. Arese, P., Mannuzzu, L., et al.: Pathophysiology of favism. *Folia Haematol.* **116**: 745, 1989.
10. Baehner, R. L., Nathan, D. G., et al.: Oxidant injury of Caucasian glucose-6-phosphate dehydrogenase deficient red blood cells by phagocytosing leukocytes during infection. *J. Clin. Invest.* **50**: 2466, 1971.
11. Bernini, L., Latte, B., et al.: Survival of ^{51}Cr -labelled red cells in subjects with thalassaemia triat, G6PD deficiency or both abnormalities. *Br. J. Haematol.* **10**: 171, 1964.
12. Betke, K., Brewer, G.J., et al.: Standardization of procedures for the study of glucose-6-phosphate dehydrogenase. *WHO Tech. Rep. Ser.* **366**: 53p, 1967.
13. Beutler, E.: Special modifications for the fluorescent screening test for glucose-6-phosphate dehydrogenase deficiency. *Blood* **32**: 816, 1968.
14. Beutler, E.: Glucose-6-phosphate dehydrogenase deficiency. *In Hemolytic Anemia in Disorders of Red Cell Metabolism.* Beutler, E. (ed.), New York, Plenum Medical Book Co., pp. 23-167, 1978.

15. Beutler, E.: The red cell. In *Hemolytic Anemia in Disorders of Red Cell Metabolism*. Beutler, E. (ed.), New York, Plenum Medical Book Co., pp. 1-21, 1978.
16. Beutler, E.: The hemolytic effect of pamaquine and related compounds. *Blood*, 14: 103-39, 1959.
17. Beutler, E.: The relationship of red cell enzymes to red cell life span. *Blood Cells* 14:69, 1988.
18. Beutler, E.: The genetics of glucose-6-phosphate dehydrogenase deficiency. *Semin. Hematol.* 27: 137, 1990.
19. Beutler, E.: Glucose-6-phosphate dehydrogenase deficiency N. Engl. J. Med. 324: 169, 1991.
20. Beutler, E., Dern, R.J., et al.: The hemolytic effect of primaquine. IV. The relationship of cell age to hemolysis. *J. Lab. Clin. Med.* 44:439, 1954.
21. Beutler, E., Dern, R.J., et al.: The hemolytic effect of primaquine. VI. An *in vitro* test for sensitivity of erythrocytes to primaquine. *J. Lab. Clin. Med.* 45: 40, 1955.
22. Beutler, E., Gelbart, T., et al.: Human red cell glucose-6-phosphate dehydrogenase: all active enzyme has sequence predicted by the X chromosome-encoded cDNA. *Cell* 62:7, 1990.
23. Beutler, E., and Kuhl, W.: The NT 1311 polymorphism of G6PD: G6PD Mediterranean mutation may have arisen more than once. *Am. J. Hum. Genet.* 47: 1008, 1990.

24. Beutler, E., Kuhl, W., et al.: DNA sequence abnormalities of human glucose-6-phosphate dehydrogenase variants. *J. Biol. Chem.* **266**: 4145, 1991.
25. Beutler, E., Kuhl, W., et al.: Some Mexican glucose-6-phosphate dehydrogenase (G-6-PD) variants revisited. *Hum. Genet.* **86**: 371, 1991.
26. Beutler, E., Kuhl, W., et al.: Molecular heterogeneity of glucose-6-phosphate dehydrogenase A-. *Blood* **74**: 2550, 1989.
27. Beutler, E., Yeh, M., et al.: The normal human female as a mosaic of X-chromosome activity: studies using the gene for G6PD deficiency as a marker. *Proc. Natl. Acad. Sci. USA* **48**: 9, 1962.
28. Beutler, E., and Yoshida, A.: Genetic variation of glucose-6-phosphate dehydrogenase: a catalogue and future prospects. *Medicine (Balt.)* **67**: 311, 1988.
29. Bienzle, U., Ayeni, O., et al.: glucose-6-phosphate dehydrogenase deficiency and malaria. Greater resistance of females heterozygous for enzyme deficiency and of males with non-deficient variant. *Lancet* **1**: 107, 1972.
30. Bienzle, U., Effiong, C.E., et al.: Erythrocyte enzymes in neonatal jaundice. *Acta Haematol. (Basel)* **55**: 10, 1976.
31. Bienzle, U., Effiong, C. E., et al.: Erythrocyte glucose-6-phosphate dehydrogenase deficiency (G6PD type A-) and neonatal jaundice. *Acta Paediatr. Scand.* **65**:701, 1976.

32. Bienzle, U., Sodeinde, O., et al.: G6PD deficiency and sickle cell anemia: frequency and features of the association in an African community. *Blood* **46**: 591, 1975.
- 32a. Blanckaert N, Muraca M: Liquid-Chromatographic Assay and Identification of Mono-and Diester Conjugates of Bilirubin in Normal Serum. *Clin. Chem.* 29, pp. 1767-1771, 1983.
33. Bowman J, George H. Rh isoimmunization during pregnancy. *Can Med Assoc J.* 118: 623-28, 1978.
34. Bracci, R., Buonocore, G., et al.: Neonatal hyperbilirubinaemia. Evidence for a role of the erythrocyte enzyme activities involved in the detoxication of oxygen radicals. *Acta Paediatr. Scand.* **77**: 349, 1988.
35. Brewer, G.J., Tarlov, A. R., et al.: The methemoglobin reduction test for primaquine type sensitivity of erythrocytes. A simplified procedure for detecting a specific hypersusceptibility to drug hemolysis. *J.A.M.A.* **180**: 386, 1962.
36. Britton JR, Britton HL, Beebe SA. Early discharge of the term newborn: a continued dilemma. *Pediatrics.* **94**: 291-296, 1994.
- 36a. Broderson R: Bilirubin Diglucuronide in Normal Human Blood Serum. *Scand. J. Clinical Lab Invest.* 18: pp. 361-379, 1996.

37. Camardella, L., Caruso, C., et al.: Human erythrocyte glucose-6-phosphate dehydrogenase. Identification of a reactive lysyl residue labelled with pyridoxal-5'-phosphate. *Eur. J. Biochem.* **171**: 45, 1988.
38. Carson P, Flanogen C, Alving A. Enzymatic deficiency in primaquine sensitive erythrocytes. *Science*, **124**: 484-485, 1956.
39. Chan, T. K., Chan, W.C., et al.: Erythrocyte hemighosts: a hallmark of severe oxidative injury in vivo. *Br. J. Haematol.* **50**: 575, 1982.
40. Chen, E. Y., Cheng, A. L., et al.: Complete sequence of the human glucose-6-phosphate dehydrogenase gene. *Genomics* **10**: 792, 1991.
41. Chevion, M., Navok, T., et al.: The chemistry of favism-inducing compounds. The properties of isouramil and divicine and their reaction with glutathione. *Eur. J. Biochem.* **127**: 405, 1982.
42. Chown B, Daws G, Haworth SG. Anemia and hyperbilirubinemia from bleeding of the fetus into the mother's circulation. *Lancet*, **1**: 1213, 1954.
43. Cohen, P., and Rosemeyer, M.A.: Human glucose-6-phosphate dehydrogenase: purification of the erythrocyte enzyme and the influence of ions on its activity. *Eur. J. Biochem.* **8**: 1, 1969.

44. Cooper, M.R., De Chatelet, L. R., et al.: Complete deficiency of leukocyte glucose-6-phosphate dehydro-genase with defective bactericidal activity. *J. Clin., Invest.* **51**: 769, 1972.
45. Dacie, J. V.: Hereditary enzyme deficiency haemolytic anaemias. III: Deficiency of glucose-6-phosphate dehydro-genase. In *Haemolytic Anaemias. The Hereditary Haemolytic Anaemias*, 3rd ed. Dacie, J.V. (ed.), London, Churchill, Livingstone, pp. 364-418, 1985.
46. DeFlora, A., Morelli, A., et al.: Human erythrocyte G6PD. Content of bound coenzyme. *Biochem. Biophys. Res. Commun.* **59**: 406, 1974.
47. Dern R, Alving A. The hemolytic effect of primaquine: The localization of the drug induced hemolytic effect in primaquine sensitive individuals. *J Lab Clin Med.* **43**: 303-309, 1954.
48. Dern R, Beutler E, Alving A. The hemolytic effect of primaquine: Primaquine sensitivity as a manifestation of multiple drug sensitivity. *J Lab Clin Med.* **45**: 30-39, 1955.
49. DeVita, G., Alcalay, M., et al.: Two point mutations are responsible for G6PD polymorphism in Sardinia. *Am. J. Hum. Genet.* **44**: 233, 1989.
50. Dimant E, Landon I. The metabolic behaviour of reduced glutathione (GSH) in human erythrocytes. *J Biol Chem.* **213**: 769-76, 1955.

- 50a. Doumas BT, Kwok-Cheung PP, Perry BW, Jendrzejczak B, McComb RB, Schaffer R, and Hause LL: Candidate Reference Method for Determination of Total Bilirubin in Serum: Development and Validation. *Clin. Chem.* 31: 1779, 1985.
51. Doxiadis S, Fessas P, Valaes T. Glucose 6-phosphate dehydrogenase deficiency: A new etiological factor of severe neonatal jaundice. *Lancet*, 1: 297-99, 1964.
52. Doxiadis, S. A., and Valaes, F.: The clinical picture of glucose-6-phosphate dehydrogenase deficiency in early childhood. *Arch. Dis. Child.* 39: 545, 1964.
53. Doxiadis, S.A., Valaes, T., et al.: Risk of severe jaundice in glucose-6-phosphate dehydrogenase deficiency of the newborn. Differences in population groups. *Lancet* 2:1210, 1964.
54. Drew W, Bertil G. Erythrocyte enzymes disorders in children. *Pediatr Clin N Amer.* 27: 449-62, 1980.
55. Ekert, U., and Rawlinson, I.: Deferoxamine and favism. *N. Engl. J. Med.* 312: 1260, 1985.
56. Escobar, M.A., Heller, P., et al.: "Complete" erythrocyte glucose-6-phosphate dehydrogenase deficiency. *Arch. Intern. Med.* 113: 428, 1964.
- 56a. Evaluation of Precision Performance of Clinical Chemistry Devices, Second edition, Order Code EP5-T2; National Committee for Clinical Laboratory Standards, Vol.12(4), pp. 1-45, 1992.

57. Fairbanks, V.F., and Lampe, L.T.: A tetrazolium-linked cytochemical method for estimation of glucose-6-phosphate dehydrogenase activity in individual erythrocytes: applications in the study of heterozygotes for glucose-6-phosphate dehydrogenase deficiency. *Blood* **31**: 589, 1968.
58. Fermi, C., and Martinetti, P.: Studio sul favismo. *Ann. Igiene Sper.* **15**: 76, 1958.
59. Fialkow, P.J.: Clonal origin of human tumors. *Biochim. Biophys. Acta* **458**: 283, 1976.
60. Fischer, T. M., Meloni, T., et al.: Membrane cross bonding in red cells in favic crisis: a missing link in the mechanism of extravascular hemolysis. *Br. J. Haematol.* **59**: 159, 1985.
61. Gaetani, G.F., and Ferraris, A.M.: Recent developments on Mediterranean G6PD. *Br. J. Haematol.* **68**:1, 1988.
62. Gaetani, G.F., Galiano, S., et al.: Catalase and glutathione peroxidase are equally active in detoxification of hydrogen peroxide in human erythrocytes. *Blood* **73**:334, 1989.
63. Gaetani, G.F., Mareni, C., et al.: Haemolytic effect of two sulphonamides evaluated by a new method. *Br. J. Haematol.* **32**: 183, 1976.
64. Gale R, Seidman DS, Dollberg S, Stevenson DK. Epidemiology of neonatal jaundice in the Jerusalem population. *J Pediatr Gastroenterol Nutr.* **10**: 82-86, 1990.

65. Galiano, S., Gaetani, G.F., et al.: Favism in the African type of glucose-6-phosphate dehydrogenase deficiency (A-). *Br. Med. J.* **300**: 236, 1990.
66. Gapps T, Giller H, Jolly H, Wolledge S. Glucose 6-phosphate dehydrogenase and neonatal jaundice in Nigeria. *Lancet*, **2**: 379-81, 1963.
67. Gray, F.R., Klebanoff, S.J., et al.: Neutrophil dysfunction, chronic granulomatous disease and non-spherocytic haemolytic anemia caused by complete deficiency of glucose-6-phosphate dehydrogenase. *Lancet* **2**: 530, 1973.
68. Harley, J.D., Agar, N.S., et al.: Glucose-6-phosphate dehydrogenase variants: Gd(+) Alexandra associated with neonatal jaundice and Gd(-) Camperdown in a young man with lamellar cataracts. *J. Lab. Clin. Med.* **91**: 295, 1978.
69. Henikoff, S., and Smith, J.M.: The human mRNA that provides the N-terminus of chimeric G6PD encodes GMP reductase. *Cell* **58**: 1021, 1989.
70. Hirono, A., and Beutler, E.: Molecular cloning and nucleotide sequence of cDNA for human glucose-6-phosphate dehydrogenase variant (A-). *Proc. Natl. Acad. Sci. USA* **85**: 3951, 1988.
71. Hirono, A., Kuhl, W., et al.: Identification of the binding domain for NADP^+ of human glucose-6-phosphate dehydrogenase by sequence analysis of mutants. *Proc. Natl. Acad. Sci. USA* **86**: 10015, 1989.

72. Hollander, N., Selvaraj, P., et al.: Biosynthesis and function of LFA-3 in human mutant cells deficient in phosphatidylinositol-anchored proteins. *J. Immunol.* **141**: 4283, 1988.
73. Horecker, B.L., and Smyrniotis, A.: Glucose-6-phosphate dehydrogenase. In *Methods in Enzymology*, Vol. 1. Colowick, N., and Kaplan, N. O. (eds.), New York, Academic Press, p. 323, 1955.
74. Hori, S.H.: Glucose-6-phosphate dehydrogenase and hexose-6-phosphate dehydrogenase: An evolutionary aspect. In *Glucose-6-phosphate dehydrogenase*. Yoshida, A., and Beutler, E. (eds.), Orlando, FL, Academic Press, pp. 313-343, 1986.
75. Ifekwunigwe, A.E., and Luzzatto, L.: Kernicterus in G6PD deficiency. *Lancet* **1**:667, 1966.
76. Jeffery, J., Soderling-Barros, J., et al.: Glucose-6-phosphate dehydrogenase. Characteristics revealed by the rat liver enzyme. *Eur. J. Biochem.* **186**: 551, 1989.
77. Johnson, G.J., Allen, D.W., et al.: Red cell membrane polypeptide aggregates in glucose-6-phosphate dehydrogenase mutants with chronic haemolytic disease: a clue to the mechanism of haemolysis. *N. Engl. J. Med.* **301**: 522, 1979.
78. Kanno, H., Huang, I. -Y., et al.: Two structural genes on different chromosomes are required for encoding the major subunit of human red cell glucose-6-phosphate dehydrogenase. *Cell* **58**: 595, 1989.

79. Kasper, M.L., Miller, W.J., et al.: G6PD deficiency infectious haemolysis: a complement-dependent innocent-bystander phenomenon. *Br. J. Haematol.* **63**: 85, 1986.
80. Kattamis, C. A., and Tjortjatou, F.: The hemolytic process of viral hepatitis in children with normal or deficient glucose-6-phosphate dehydrogenase activity. *J. Pediatr.* **77**: 422, 1970.
81. Khalifa, A.S., El-Alfy, M.S., et al.: Effect of desferrioxamine B on hemolysis in glucose-6-phosphate dehydrogenase deficiency. *Acta Haematol. (Basel)* **82**: 113, 1989.
82. Kirkman HJ. Further evidences for a racial difference in the frequency of ABO and Rh hemolytic disease of the newborn. *J Pediatr.* **90**: 717-21, 1977.
83. Kirkman, H.N., Gaetani, G.D., et al.: Red cell NADP⁺ and NADPH in glucose-6-phosphate dehydrogenase deficiency. *J. Clin. Invest.* **55**: 875, 1975.
84. Kirkman, H. N., and Gaetani, G. F.: Catalase: a tetrameric enzyme with four tightly bound molecules of NADPH. *Proc. Natl. Acad. Sci. USA* **81**: 4343, 1984.
85. Kirkman, H.N., Riley, H.D., et al.: Different enzymic expression of human glucose-6-phosphate dehydrogenase. *Proc. Natl. Acad. Sci. USA* **46**: 938, 1960.
86. Kurdi-Haidar, B., and Luzzatto, L.: Expression and characterization of glucose-6-phosphate dehydrogenase of *Plasmodium falciparum*. *Mol. Biochem. Parasitol.* **41**: 83, 1990.

- 86a. Lauff JL, Kasper ME, Ambrose RT: Separation of Bilirubin Species in Serum and Bile by High-Performance Reversed Phase Liquid Chromatography. *Journal of Chromatography*, 226: 391-402, 1981.
87. Levy, H.R.: Glucose-6-phosphate dehydrogenase. In *Advances in Enzymology*, Vol. 48. Meister, A. (ed.), New York, Wiley, pp. 97-192, 1979.
88. Linder, D., and Gartler, S.M.: Glucose-6-phosphate dehydrogenase mosaicism. Utilization as a cell marker in the study of leiomyomas. *Science* **150**: 67, 1965.
89. Ling, I.T., and Wilson, R.J.M.: G6PD activity of the malarial parasite *Plasmodium falciparum*. *Mol. Biochem. Parasitol.* **31**: 47, 1988.
90. Low, P.S.: Structure and function of the cytoplasmic domain of band 3: center of erythrocyte membrane-peripheral protein interactions. *Biochim. Biophys. Acta* **864**: 145, 1986.
91. Luzzatto, L.: Regulation of the activity of glucose-6-phosphate dehydrogenase by NADP^+ and NADPH. *Biochem. Biophys. Acta* **146**: 18, 1967.
92. Luzzatto, L.: Studies of polymorphic traits for the characterization of populations: African populations south of the Sahara. *Israel J. Med. Sci.* **9**: 1181, 1973.

93. Luzzatto, L.: G6PD deficiency and hemolytic anemia. In: Nathan DG, Oski FA, eds. *Hematology of Infancy and Childhood*. Philadelphia: WB Saunders Co.; 674-695, 1993.
94. Luzzatto, L.: Genetic factors in malaria. Bull. World Health Org. **50**: 195, 1974.
95. Luzzatto, L.: Inherited haemolytic states: Glucose-6-phosphate dehydrogenase deficiency. Clin. Hematol. **4**: 83, 1975.
96. Luzzatto, L.: Genetics of human red cells and susceptibility to malaria. In *Modern Genetic Concepts and Techniques in the Study of Parasites*. Michal, F. (ed.), Basel, Schwabe & Co., pp. 257-277, 1981.
97. Luzzatto, L.: Inherited haemolytic anaemias. IN *Postgraduate Haematology*, Hoffbrand, A. V., and Lewis, S.M. (eds.), 3rd ed. London, Heinemann, pp. 146-182, 1989.
98. Luzzatto, L., and Battistuzzi, G.: Glucose-6-phosphate dehydrogenase. Adv. Hum. Genet. **14**: 217, 1985.
99. Luzzatto, L., and Mehta, A.: Glucose-6-phosphate dehydrogenase deficiency. In *The Metabolic Basis of Inherited Disease*, 6th ed. Scriver, C.R., Beaudet, A. L., et al. (eds.), New York, McGraw-Hill, pp. 2237-2265, 1989.
100. Luzzatto, L., and Meloni, T.: Hemolytic anemia due to glucose-6-phosphate dehydrogenase deficiency. In *Current Therapy in Hematology-Oncology*: 1985-1986. Brain, M.C., and Carbone, P.P. (eds.), Toronto, B.C. Decker, C.V. Mosby, pp. 21-24, 1985.

101. Luzzatto, L., O'Brien, S., et al.: Origin of G6PD polymorphism: malaria and G6PD deficiency. In *Glucose-6-phosphate dehydrogenase*. Yoshida, A., and Beutler, E. (eds.), New York, Academic Press, pp. 181-193, 1986.
102. Luzzatto, L., Sodeinde, O., and Martini, G.: Genetic variation in the host and adaptive phenomena in *Plasmodium falciparum* infection. In *Malaria and the Red Cell, Ciba Foundation Symposium 94*. Evered, D., and Whelan, J. (eds.), London, Pitman, pp. 159-173, 1983.
103. Luzzatto, L., and Testa, U.: Human erythrocyte G6PD: Structure and function in normal and mutant subjects. In *Current Topics in Hematology*, Vol.1. Piomelli, S., and Yachnin, S. (eds.), New York, Alan Liss, pp. 1-70, 1978.
104. Luzzatto, L., Usanga, E. A., et al.: Imbalance in X-chromosome expression: evidence for a human X-linked gene affecting growth of haemopoietic cells. *Science* **205**: 1418, 1979.
105. MacDonald, D., Goff, M.C., et al.: Three-bp deletion in the N-terminal region of the glucose-6-phosphate dehydrogenase gene causing severe haemolytic anaemia. *Nature* **350**: 115, 1991.
106. Magon, A.M., Leipzig, R.M., et al.: Interactions of glucose-6-phosphate dehydrogenase deficiency with drug acetylation and hydroxylation reactions. *J. Lab. Clin. Med.* **97**: 764, 1981.

107. Maisels MJ, Newman TB. Kernicterus occurs in full term, healthy, newborns without apparent hemolysis. *Pediatr Res.*, **3**: 239A, 1994.
108. Marenzi, C., Repetto, L., et al.: Favism: Looking for an autosomal gene associated with Glucose-6-phosphate dehydrogenase deficiency. *J. Med. Genet.* **21**: 278, 1984.
109. Marks, P.A., and Johnson, A. B.: Relationship between the age of human erythrocytes and their osmotic resistance: a basis for separating young and old erythrocytes. *J. Clin. Invest.* **37**: 1542, 1958.
110. Martini, G., Toniolo, D., et al.: Structural analysis of the X-linked gene encoding human glucose-6-phosphate dehydrogenase. *EMBO J.* **5**: 1849, 1986.
111. Mason, P. J., Bautista, J., et al.: Human red cell glucose-6-phosphate dehydrogenase is encoded only on the X-chromosome. *Cell* **63**:9, 1990.
112. Mason, P.J., Vulliamy, T.J., et al.: The production of normal and variant human glucose-6-phosphate dehydrogenase in cos cells. *Eur. J. Biochem.* **178**: 109, 1988.
113. McCurdy P.R. Discussion. In *Glucose-6-phosphate dehydrogenase*. Yoshida, A., and Beutler, E. (eds.), New York, Academic Press, pp. 273-278, 1986.

114. Meloni, S., Costa, S., et al.: Haptoglobin, hemopexin, hemoglobin and hematocrit in newborns with erythrocyte glucose-6-phosphate dehydrogenase deficiency. *Acta Haematol. (Basel)* **54**: 284, 1975.
115. Meloni, T., Cagnazzo, G., et al.: Phenobarbital for prevention of hyperbilirubinemia in glucose-6-phosphate dehydrogenase-deficient newborn infants. *J. Pediatr.* **82**: 1048, 1973.
116. Meloni, T., Cutillo, S., et al.: Neonatal jaundice and severity of glucose-6-phosphate dehydrogenase deficiency in Sardinian babies. *Early Hum. Dev.* **15**: 317, 1987.
117. Meloni, T., Forteleoni, G., et al.: Desferrioxamine and favism. *Br. J. Haematol.* **63**: 394, 1986.
118. Meloni, T., Forteleoni, G., et al.: Relation between Aspirin and acute hemolytic anemia in glucose-6-phosphate dehydrogenase-deficient children with systemic arthritis. *Acta Haematol.* **81**: 208, 1989.
119. Melton, D.W.: HPRT gene organization and expression. In *Oxford Surveys on Eukaryotic Genes*, Vol. 4. Maclean, M. (ed.), Oxford, Oxford University Press, pp. 37-76, 1987.
120. Miller, L. H.: Genetically determined human resistance factors. In *Malaria: Principles and Practice of Malariology*, Vol. I. Weinsdorfer, W.H., and McGregor, I. (eds.), Edinburgh, Churchill Livingstone, pp. 487-500, 1988.

121. Mintzer W, Collier E. Hydrops fetalis associated with erythrocyte enzyme G6PD deficiency and maternal ingestion of fava beans and ascorbic acid. *J Pediatr.* **80**: 565, 1975.
122. Miwa, S., and Fujii, H.: Glucose-6-phosphate dehydro-genase variants in Japan. In *Glucose-6-Phosphate Dehydrogenase*. Yoshida, A., and Beutler, E. (eds.), New York, Academic Press, pp. 261-272, 1986.
123. Morelli, A., Benatti, U., et al.: Biochemical mechanisms of glucose-6-phosphate dehydrogenase deficiency. *Proc. Natl. Acad. Sci. USA* **75**: 1979, 1978.
124. Morellini, M., Colonna-Romano, S., et al.: Glucose-6-phosphate dehydrogenase of leukocyte subpopulations in normal and enzyme-deficient individuals. *Haematologica* **70**: 390, 1985.
125. Moro, F., Gorgone, G., et al.: Glucose-6-phosphate dehydrogenase deficiency and incidence of cataract in Sicily. *Ophthalmic Paediatr. Genet.* **5**: 197, 1985.
126. Motulsky, A.G.: Metabolic polymorphisms and the role of infectious diseases in human evolution. *Hum. Biol.* **32**:28, 1960.
127. Motulsky, A.G., and Campbell-Kraut, J. M.: Population genetics of glucose-6-phosphate dehydrogenase deficiency of the red cell. In *Proceedings of Conference on Genetic Polymorphisms and Geographic Variations in Disease*. Blumberg, B.S. (ed.), New York, Grune & Stratton, pp. 159-180, 1961.

128. Muhlens P. Experiments with pamaquine in Malaria. Boston United Fruit Company (Med Paper). 15th Ann Report, 66-71, 1936.
129. Nance, W. E.: Genetic tests with a sex-linked marker: G-6-PD. Cold Spring Harb. Symp. Quant. Biol. **29**:415, 1964.
130. Newman TB, Maisels MJ. Evaluation and treatment of jaundice in term infant: a kinder gentler approach. Pediatrics, **89**: 809-818, 1992.
131. Nyhan, W.L., Bakay, B., et al.: Hemizygous expression of glucose-6-phosphate dehydrogenase deficiency in erythrocytes of heterozygotes for the Lesch-Nyhan syndrome. Proc. Natl. Acad. Sci. USA **65**: 214, 1970.
132. Owa, J. A.: Relationship between exposure to icterogenic agents, G6PD deficiency and severe neonatal jaundice in Nigeria. Acta Paediatr. Scand. **78**: 848, 1989.
133. Pai, G.S., Sprenkle, J. A., et al.: Localization of the loci for hypoxanthine phosphoribosyltransferase and glucose-6-phosphate dehydrogenase and biochemical evidence of non-random X chromosome expression from studies of human X-autosome translocation. Proc. Natl. Acad. Sci. USA **77**: 2810, 1980.
134. Panich, V.: Glucose-6-phosphate dehydrogenase deficiency. Part II. Tropical Asia. Clin. Haematol. **10**:800, 1981.

135. Patterson, M., Schwartz, C., et al.: Physical mapping studies on the human X-chromosome in the region Xq27-Xqter. *Genomics* 1:297, 1987.
136. Peisach, J., Blumberg, W.E., et al.: The demonstration of ferrihemochrome intermediates in Heinz body formation following the reduction of oxyhemoglobin A by acetylphenylhydrazine. *Biochim. Biophys. Acta* 393: 404, 1975.
137. Persico, M.G., Ciccodicola, A., et al.: Functional expression of human glucose-6-phosphate dehydrogenase in *Escherichia coli*. *Gene* 78:365, 1989.
138. Persico, M.G., Viglietto, G., et al.: Isolation of human glucose-6-phosphate dehydrogenase (G6PD) cDNA clones: primary structure of the protein and unusual 5' non-coding region. *Nucleic Acids Res.* 14: 2511, 1986.
139. Peevy K. ABO hemolytic disease of the newborn: Identification of racial and antigenic factors. *Pediatr.* 61: 475-93, 1978.
140. Piomelli, S., Corash, L. M., et al.: In vivo lability of glucose-6-phosphate dehydrogenase in Gd A and Gd Mediterranean deficiency. *J. Clin. Invest.* 47: 940, 1968.
141. Ragab A, El-Alfi O, Abboud M. Incidence of G6PD deficiency in Egypt. *Amer J Hum Genet.* 18: 21, 1966.

142. Rifkind, R. A.: Heinz bodies anaemia: An ultrastructural study. II. Red cell sequestration and destruction. *Blood* **26**: 433, 1965.
143. Rinaldi, A., Filippi, G., et al.: Variability of red cell phenotypes between and within individuals in an unbiased sample of 77 certain heterozygotes for G6PD deficiency in Sardinians. *Am. J. Hum. Genet.* **28**: 496, 1976.
144. Romano E, Ruiz U, Goldgerg S. Direct antiglobin test in ABO and Rh hemolytic disease of the newborn. *Br Med J.* **1**: 524-30, 1973.
145. Ronald LP, Enrique MO. Neonatal hyperbilirubinemia. In: *Care of the high risk neonate.* 2nd ed. Philadelphia,: WB Saunders Company, 246, 1979.
146. Roth, E. F., Jr., Raventos-Suarez, C., et al.: Glucose-6-phosphate dehydrogenase deficiency inhibits in vitro growth of *Plasmodium falciparum*. *Proc. Natl. Acad. Sci. USA* **80**: 298, 1983.
147. Sansone, G., Piga, A. M., and Segni, G.: *II Favismo*. Torino: Minerva Medica, 1958.
148. Seidman DS, Paz I, Stevenson DK, et al. Neonatal hyperbilirubinemia and physical and cognitive performance at 17 years of age. *Pediatrics.* **88**: 828-833, 1991.

149. Sicard D, Claude J. Hemoglobinopathies and glucose 6-phosphate dehydrogenase deficiency in Laos. *Lancet*, **1**: 571-73, 1978.
150. Singh, A.: glucose-6-phosphate dehydrogenase deficiency: a preventable cause of mental retardation. *Br. Med. J.* **292**: 397, 1986.
151. Sir Hashim M. Hamza YO, Yahia B, Khogali FM, Sulieman GI. Poisoning from henna dye and para-phenylenediamine mixtures in children in Khartoum. *Ann Trop Paediatr.* **12**: 3-6, 1992.
152. Stevens, D. J., Wanachiwanawin, W., et al.: G6PD Canton: a common deficient variant in South East Asia caused by a 459 Arg --> Leu mutation. *Nucleic Acids Res.* **18**: 7190, 1990.
153. Szabo, P., Purrello, M., et al.: Cytological mapping of the human glucose-6-phosphate dehydrogenase gene distal to the fragile-X site suggests a high rate of meiotic recombination across this site. *Proc. Natl. Acad. Sci. USA* **81**: 7855, 1984.
154. Szeinberg, A., and Marks, P. A.: Substances stimulating glucose catabolism by the oxidative reactions of the pentose phosphate pathway in human erythrocytes. *J. Clin. Invest.* **40**: 914, 1961.
155. Szeinberg A, Oliver M, Schmidt R, Adam A, Sheha C. Glucose 6-phosphate dehydrogenase deficiency and hemolytic disease of the newborn in Israel. *Arch Dis Child*, **38**: 23-28, 1963.

156. Takizawa, T., Yoneyama, Y., et al.: A single nucleotide base transition is the basis of the common human glucose-6-phosphate dehydrogenase variant A(+). *Genomics* **1**:228, 1987.
157. Tan, K. L., and Boey, K. W.: Clinical experience with phototherapy. *Ann. Acad. Med. Singapore*. **18**:43, 1989.
158. Tarlov, A.R., Brewer, G. J., et al.: Primaquine sensitivity: glucose-6-phosphate dehydrogenase deficiency. *Arch. Intern. Med.* **109**: 209, 1962.
159. Testa, U., Meloni, T., et al.: Genetic heterogeneity of glucose-6-phosphate dehydrogenase deficiency in Sardinia. *Hum. Genet.* **56**: 99, 1980.
160. The Newborn Unit, Security Forces Hospital, Riyadh, K.S.A. Annual Statistics 1996 & 1997.
161. Town, M., Athanasiou Metaxa, M., et al.: Intragenic interspecific complementation of glucose-6-phosphate dehydrogenase in human-hamster cell hybrids. *Somat. Cell Mol. Genet.* **16**: 97, 1990.
162. Tsung C, Huoyao W, Ouentin B. Increased incidence of severe hyperbilirubinemia among newborn Chinese infants with G6PD deficiency. *Pediatr.* **37**: 994-99, 1966.
163. Tugwell, P.: Glucose-6-phosphate dehydrogenase deficiency in Nigerians with jaundice associated with lobar pneumonia. *Lancet* **1**: 968, 1973.

164. Ursini, M.V., Scalera, L., et al.: High level of transcription driven by a 400 bp segment of the human G6PD promoter. *Biochem. Biophys. Res. Commun.* **170**: 1203, 1990.
165. Usanga, E. A., and Luzzatto, L.: Adaptation of *Plasmodium falciparum* to glucose-6-phosphate dehydrogenase-deficient host red cells by production of parasite-encoded enzyme. *Nature* **313**: 793, 1985.
166. Valaes T. Severe neonatal jaundice associated with glucose-6-phosphate dehydrogenase deficiency: pathogenesis and global epidemiology. *Acta Paediatr Suppl.* **394**: 58-76, 1994.
167. Van Noorden, C.J. F., Vogels, I. M. C., et al.: A sensitive cytochemical staining method for glucose-6-phosphate dehydrogenase activity in individual erythrocytes. *Histochemistry* **75**: 493, 1982.
168. Viglietto, G., Montanaro, V., et al.: Common glucose-6-phosphate dehydrogenase (G6PD) variants from the Italian population: biochemical and molecular characterization. *Ann. Hum. Genet.* **54**:1, 1990.
169. Vives-Corrons, J. - L., Kuhl, W., et al.: Molecular genetics of the glucose-6-phosphate dehydrogenase (G6PD) Mediterranean variant and description of a new G6PD mutant, G6PD Andalus 1361A. *Am. J. Hum. Genet.* **47**: 575, 1990.
170. Vives-Corrons, J. L., Feliu, E., et al.: Severe glucose-6-phosphate dehydrogenase (G6PD) deficiency associated with chronic haemolytic anaemia, granulocyte dysfunction and

- increased susceptibility to infections. Description of a new molecular variant (G6PD Barcelona). *Blood* **59**: 428, 1982.
171. Vulliamy, T.J., D'Urso, M., et al.: Diverse point mutations in the human glucose-6-phosphate dehydrogenase enzyme deficiency and mild or severe hemolytic anemia. *Proc. Natl. Acad. Sci. USA* **85**: 5171, 1988.
 172. Vulliamy, T.J., Wanachiwanawin, W., et al.: G6PD Mahidol, a common deficient variant in South East Asia is caused by a (163) glycine --> serine mutation. *Nucleic Acids Res.* **17**: 5868, 1989.
 173. WHO Working Group: Glucose-6-phosphate dehydro-genase deficiency. *Bull. World Health Org.* **67**: 601, 1989.
 174. Waugh, S. M., Walder, J. A., et al.: Partial characterization of the copolymerization reaction of erythrocyte membrane band 3 with hemichrome. *Biochemistry* **26**: 1777, 1987.
 175. William R, Hock Boon W. Hyperbilirubinemia and kernicterus in G6PD deficient infants in Singapore. *Pediatr.* **44**: 1055-60, 1968.
 176. Wintrobe A. Hemolytic disease of the newborn. In: *Clinical hematology*. 8th ed. Lea and Febrger, 909-16, 1981.
 177. Winterbourn, C., Cowden, W.B., et al.: Auto-oxidation of dialuric acid, divicine and isouramil. Superoxide dependent and independent mechanisms. *Biochem. Phramacol.* **38**: 611, 1989.

178. Winterbourn, C.C., and Stern, A.: Human red cells scavenge extracellular hydrogen peroxide and inhibit formation of hypochlorous acid and hydroxyl radical. *J. Clin. Invest.* **80**:1486, 1987.
179. Worlledge, S., Luzzatto, L., et al: Rhesus immunization in Nigeria. *Vox Sang.* **14**: 202, 1968.
180. Yoshida, A., and Kan, Y. W.: Origin of "fused" glucose-6-phosphate dehydrogenase. *Cell* **62**:11, 1990.
181. Zonnevrandt M. Frequency of glucose-6-phosphate dehydrogenase deficiency in relation to altitude in Bulgaria. *Bull WHO*, **53**(4): 659-662, 1980.
182. Zuo, L., Chen, E., et al.: Genetic study of Chinese G6PD variants by direct PCR sequencing (abstract). *Blood (Suppl.)* **76**:51A, 1990.