

# Chapter 206

## Leishmaniasis and Other Protozoan Infections

Joelle M. Malek & Samer H. Ghosn

### REFERENCES

1. Klaus SN, Frankenburg S, Ingber A: Epidemiology of cutaneous leishmaniasis. *Clin Dermatol* **17**(3):257-260, 1999
2. Oumeish OY: Cutaneous leishmaniasis: A historical perspective. *Clin Dermatol* **17**(3):249-254, 1999
3. Lupi O et al: Tropical dermatology: Tropical diseases caused by protozoa. *J Am Acad Dermatol* **60**(6):897-925, 2009; quiz 926-898
4. David CV, Craft N: Cutaneous and mucocutaneous leishmaniasis. *Dermatol Ther* **22**(6):491-502, 2009
5. Herwaldt BL, Stokes SL, Juranek DD: American cutaneous leishmaniasis in U.S. travelers. *Ann Intern Med* **118**(10):779-784, 1993
6. Norton SA, Frankenburg S, Klaus SN: Cutaneous leishmaniasis acquired during military service in the Middle East. *Arch Dermatol* **128**(1):83-87, 1992
7. Rose K et al: Cutaneous leishmaniasis in red kangaroos: Isolation and characterisation of the causative organisms. *Int J Parasitol* **34**(6):655-664, 2004
8. Desjeux P: Leishmaniasis: Current situation and new perspectives. *Comp Immunol Microbiol Infect Dis* **27**(5):305-318, 2004
9. Nelson DA, Gustafson TL, Spielvogel RL: Clinical aspects of cutaneous leishmaniasis acquired in Texas. *J Am Acad Dermatol* **12**(6):985-992, 1985
10. Furner BB: Cutaneous leishmaniasis in Texas: Report of a case and review of the literature. *J Am Acad Dermatol* **23**(2 Pt 2):368-371, 1990
11. Reithinger R et al: Cutaneous leishmaniasis. *Lancet Infect Dis* **7**(9):581-596, 2007
12. Snider H et al: Sex hormones and modulation of immunity against leishmaniasis. *Neuroimmunomodulation* **16**(2):106-113, 2009
13. Dedet JP et al: Cutaneous leishmaniasis. The parasite. *Clin Dermatol* **17**(3):261-268, 1999
14. Symmers WS: Leishmaniasis acquired by contagion: A case of marital infection in Britain. *Lancet* **1**:127-132, 1960
15. Eltoun IA et al: Congenital kala-azar and leishmaniasis in the placenta. *Am J Trop Med Hyg* **46**(1):57-62, 1992
16. Pagliano P et al: Visceral leishmaniasis in pregnancy: A case series and a systematic review of the literature. *J Antimicrob Chemother* **55**(2):229-233, 2005
17. Bruce-Chwatt LJ: Blood transfusion and tropical disease. *Trop Dis Bull* **69**(9):825-862, 1972
18. Pineda JA et al: Leishmania spp infection in injecting drug users. *Lancet* **360**(9337):950-951, 2002
19. Pineda JA et al: Evidence of increased risk for leishmania infantum infection among HIV-seronegative intravenous drug users from southern Spain. *Eur J Clin Microbiol Infect Dis* **20**(5):354-357, 2001
20. Cruz I et al: Leishmania in discarded syringes from intravenous drug users. *Lancet* **359**(9312):1124-1125, 2002
21. Amela C et al: Injecting drug use as risk factor for visceral leishmaniasis in AIDS patients. *Eur J Epidemiol* **12**(1):91-92, 1996
22. Morillas-Marquez F et al: Leishmania infantum (Protozoa, kinetoplastida): transmission from infected patients to experimental animal under conditions that simulate needle-sharing. *Exp Parasitol* **100**(1):71-74, 2002
23. Uezato H et al: The attachment and entry of Leishmania (Leishmania) major into macrophages: Observation by scanning electron microscope. *J Dermatol* **32**(7):534-540, 2005
24. Saliba EK, Oumeish OY: Reservoir hosts of cutaneous leishmaniasis. *Clin Dermatol* **17**(3):275-277, 1999
25. Ghersetich I et al: Immune response to Leishmania infection in human skin. *Clin Dermatol* **17**(3):333-338, 1999
26. Konecny P, Stark DJ: An Australian case of New World cutaneous leishmaniasis. *Med J Aust* **186**(6):315-317, 2007
27. Davies CR et al: The epidemiology and control of leishmaniasis in Andean countries. *Cad Saude Publica* **16**(4):925-950, 2000

28. Rotureau B: Are New World leishmaniasis becoming anthroponoses? *Med Hypotheses* **67**(5):1235-1241, 2006
29. Rodriguez-Bonfante C et al: Genotypically distinct *Leishmania colombiensis* isolates from Venezuela cause both cutaneous and visceral leishmaniasis in humans. *Infect Genet Evol* **3**(2):119-124, 2003
30. Killick-Kendrick R et al: The ultrastructure of *Leishmania major* in the foregut and proboscis of *Phlebotomus papatasi*. *Parasitol Res* **74**(6):586-590, 1988
31. Murray HW et al: Advances in leishmaniasis. *Lancet* **366**(9496):1561-1577, 2005
32. Desjeux P: The increase in risk factors for leishmaniasis worldwide. *Trans R Soc Trop Med Hyg* **95**(3):239-243, 2001
33. Chang KP, Akman L, Nielsen JS: *Leishmania* virulence and genetic heterogeneity. *Clin Dermatol* **17**(3):269-273, 1999
34. Wahba M et al: Immunomodulatory properties of sand fly saliva and its role on vertebrate host. *J Egypt Soc Parasitol* **35**(3 Suppl):1135-1147, 2005
35. Weigle K, Saravia NG: Natural history, clinical evolution, and the host-parasite interaction in New World cutaneous Leishmaniasis. *Clin Dermatol* **14**(5):433-450, 1996
36. Reithinger R et al: Efficacy of thermotherapy to treat cutaneous leishmaniasis caused by *Leishmania tropica* in Kabul, Afghanistan: A randomized, controlled trial. *Clin Infect Dis* **40**(8):1148-1155, 2005
37. Zhang WW et al: Comparison of the A2 gene locus in *Leishmania donovani* and *Leishmania major* and its control over cutaneous infection. *J Biol Chem* **278**(37):35508-35515, 2003
38. McDowell MA et al: *Leishmania* priming of human dendritic cells for CD40 ligand-induced interleukin-12p70 secretion is strain and species dependent. *Infect Immun* **70**(8):3994-4001, 2002
39. Engwerda CR, Ato M, Kaye PM: Macrophages, pathology and parasite persistence in experimental visceral leishmaniasis. *Trends Parasitol* **20**(11):524-530, 2004
40. Kubba R, Al-Gindan Y: Leishmaniasis. *Dermatol Clin* **7**(2):331-351, 1989
41. Magill AJ et al: Visceral infection caused by *Leishmania tropica* in veterans of Operation Desert Storm. *N Engl J Med* **328**(19):1383-1387, 1993
42. Mebrahtu Y et al: Visceral leishmaniasis unresponsive to pentostam caused by *Leishmania tropica* in Kenya. *Am J Trop Med Hyg* **41**(3):289-294, 1989
43. Solbach W, Laskay T: The host response to *Leishmania* infection. *Adv Immunol* **74**:275-317, 2000
44. Riera C et al: Detection of *Leishmania infantum* cryptic infection in asymptomatic blood donors living in an endemic area (Eivissa, Balearic Islands, Spain) by different diagnostic methods. *Trans R Soc Trop Med Hyg* **98**(2):102-110, 2004
45. le Fichoux Y et al: Occurrence of *Leishmania infantum* parasitemia in asymptomatic blood donors living in an area of endemicity in southern France. *J Clin Microbiol* **37**(6):1953-1957, 1999
46. Salman SM, Rubeiz NG, Kibbi AG: Cutaneous leishmaniasis: Clinical features and diagnosis. *Clin Dermatol* **17**(3):291-296, 1999
47. Akilov OE, Khachemoune A, Hasan T: Clinical manifestations and classification of Old World cutaneous leishmaniasis. *Int J Dermatol* **46**(2):132-142, 2007
48. Magill AJ et al: Visceral infection due to *Leishmania tropica* in a veteran of Operation Desert Storm who presented 2 years after leaving Saudi Arabia. *Clin Infect Dis* **19**(4):805-806, 1994
49. Sacks DL et al: Indian kala-azar caused by *Leishmania tropica*. *Lancet* **345**(8955):959-961, 1995
50. Veraldi S et al: Psoriasiform cutaneous leishmaniasis. *Int Soc Dermatol* **45**:129-130, 2006
51. Vella Briffa D: Cutaneous leishmaniasis in the Maltese Islands. *Br J Dermatol* **113**(3):370-371, 1985
52. Hatam GR, Hosseini SM, Ardehali S: Dermotropic isolates of *Leishmania infantum* in Iran. *Trans R Soc Trop Med Hyg* **91**(4):440, 1997
53. Nuwayri-Salti N et al: Identification of *Leishmania* isolates from a Lebanese population. *Am J Trop Med Hyg* **51**(1):98-101, 1994
54. Kubba R et al: Clinical diagnosis of cutaneous leishmaniasis (oriental sore). *J Am Acad Dermatol* **16**(6):1183-1189, 1987
55. Zerehsaz F et al: Erysipeloid cutaneous leishmaniasis: Treatment with a new, topical, pure herbal extract. *Eur J Dermatol* **13**(2):145-148, 2003
56. Salmanpour R et al: Erysipeloid leishmaniasis: An unusual clinical presentation. *Eur J Dermatol* **9**(6):458-459, 1999
57. Raja KM et al: Unusual clinical variants of cutaneous leishmaniasis in Pakistan. *Br J Dermatol* **139**(1):111-113, 1998
58. Lahiry A: Unusual presentation of cutaneous leishmaniasis. *Indian J Dermatol Venereol Leprol* **68**(3):145-146, 2002

59. Azadeh B: "Localized" leishmania lymphadenitis: A light and electron microscopic study. *Am J Trop Med Hyg* **34**(3):447-455, 1985
60. Kubba R et al: Dissemination in cutaneous leishmaniasis. I. Subcutaneous nodules. *Int J Dermatol* **26**(5):300-304, 1987
61. Kubba R et al: Peripheral nerve involvement in cutaneous leishmaniasis (Old World). *Int J Dermatol* **26**(8):527-531, 1987
62. Hepburn NC: Cutaneous leishmaniasis. *Clin Exp Dermatol* **25**(5):363-370, 2000
63. Herwaldt BL, Arana BA, Navin TR: The natural history of cutaneous leishmaniasis in Guatemala. *J Infect Dis* **165**(3):518-527, 1992
64. Barral A et al: Lymphadenopathy associated with *Leishmania braziliensis* cutaneous infection. *Am J Trop Med Hyg* **47**(5):587-592, 1992
65. Ponce C et al: *Leishmania donovani* chagasi: New clinical variant of cutaneous leishmaniasis in Honduras. *Lancet* **337**(8733):67-70, 1991
66. Noyes H et al: *Leishmania chagasi*: Genotypically similar parasites from Honduras cause both visceral and cutaneous leishmaniasis in humans. *Exp Parasitol* **85**(3):264-273, 1997
67. Belli A et al: Widespread atypical cutaneous leishmaniasis caused by *Leishmania* (L.) Chagasi in Nicaragua. *Am J Trop Med Hyg* **61**(3):380-385, 1999
68. Calvopina M et al: Atypical clinical variants in New World cutaneous leishmaniasis: Disseminated, erysipeloid, and recidiva cutis due to *Leishmania* (V.) panamensis. *Am J Trop Med Hyg* **73**(2):281-284, 2005
69. Bailey MS, Lockwood DN: Cutaneous leishmaniasis. *Clin Dermatol* **25**(2):203-211, 2007
70. Herrera E, Sanchez P, Bosch RJ: Disseminated cutaneous leishmaniasis in an HIV-infected patient. *Int J STD AIDS* **6**(2):125-126, 1995
71. Postigo C et al: Cutaneous lesions in patients with visceral leishmaniasis and HIV infection. *J Infect* **35**(3):265-268, 1997
72. Mattos M et al: American cutaneous leishmaniasis associated with HIV infection: Report of four cases. *J Eur Acad Dermatol Venereol* **10**(3):218-225, 1998
73. Schraner C et al: Successful treatment with miltefosine of disseminated cutaneous leishmaniasis in a severely immunocompromised patient infected with HIV-1. *Clin Infect Dis* **40**(12):e120-e124, 2005
74. Couppie P et al: Comparative study of cutaneous leishmaniasis in human immunodeficiency virus (HIV)-infected patients and non-HIV-infected patients in French Guiana. *Br J Dermatol* **151**(6):1165-1171, 2004
75. Bryceson A: Cutaneous leishmaniasis. *Br J Dermatol* **94**(2):223-226, 1976
76. Stefanidou MP et al: A rare case of leishmaniasis recidiva cutis evolving for 31 years caused by *Leishmania tropica*. *Int J Dermatol* **47**(6):588-589, 2008
77. Calvopina M et al: Leishmaniasis recidiva cutis due to *Leishmania* (Viannia) panamensis in subtropical Ecuador: Isoenzymatic characterization. *Int J Dermatol* **45**(2):116-120, 2006
78. Ul Bari A, Raza N: Lupoid cutaneous leishmaniasis: A report of 16 cases. *Indian J Dermatol Venereol Leprol* **76**(1):85, 2010
79. Ghosn S, Dahdah MJ, Kibbi AG: Mutilating lupoid leishmaniasis: Twelve years to make the diagnosis! *Dermatology* **216**(2):187-189, 2008
80. Ramos-Santos C et al: Visceral leishmaniasis caused by *Leishmania* (L.) mexicana in a Mexican patient with human immunodeficiency virus infection. *Mem Inst Oswaldo Cruz* **95**(5):733-737, 2000
81. Gillis D et al: Diffusely disseminated cutaneous *Leishmania* major infection in a child with acquired immunodeficiency syndrome. *Pediatr Infect Dis J* **14**(3):247-249, 1995
82. WHO: The leishmaniases and *Leishmania*/HIV co-infections, <http://www.who.int/mediacentre/factsheets/fs116/en/index.html>
83. Al-Gindan Y et al: A case of mucocutaneous leishmaniasis in Saudi Arabia caused by *Leishmania* major and its response to treatment. *Clin Exp Dermatol* **8**(2):185-188, 1983
84. Barnetson RS, Ridley RS, Wheate HW: A form of mucocutaneous leishmaniasis in the Old World. *Trans R Soc Trop Med Hyg* **72**(5):516-518, 1978
85. Giamarellou H: AIDS and the skin: Parasitic diseases. *Clin Dermatol* **18**(4):433-439, 2000
86. Montalban C et al: Visceral leishmaniasis (kala-azar) as an opportunistic infection in patients infected with the human immunodeficiency virus in Spain. *Rev Infect Dis* **11**(4):655-660, 1989
87. Rosenthal E et al: Visceral leishmaniasis and HIV-1 co-infection in southern France. *Trans R Soc Trop Med Hyg* **89**(2):159-162, 1995

88. Ara M et al: Visceral leishmaniasis with cutaneous lesions in a patient infected with human immunodeficiency virus. *Br J Dermatol* **139**(1):114-117, 1998
89. Desjeux P: Global control and Leishmania HIV coinfection. *Clin Dermatol* **17**(3):317-325, 1999
90. Hernandez D et al: Leishmania braziliensis causing visceral leishmaniasis in a patient with human immunodeficiency virus infection, identified with the aid of the polymerase chain reaction. *Trans R Soc Trop Med Hyg* **87**(6):627-628, 1993
91. Alvar J et al: Leishmania and human immunodeficiency virus coinfection: The first 10 years. *Clin Microbiol Rev* **10**(2):298-319, 1997
92. Gallego MA et al: Kaposi's sarcoma with an intense parasitization by Leishmania. *Cutis* **57**(2):103-105, 1996
93. Rosenthal E et al: HIV and Leishmania coinfection: A review of 91 cases with focus on atypical locations of Leishmania. *Clin Infect Dis* **31**(4):1093-1095, 2000
94. Zijlstra EE et al: Post-kala-azar dermal leishmaniasis. *Lancet Infect Dis* **3**(2):87-98, 2003
95. Ramesh V, Mukherjee A: Post-kala-azar dermal leishmaniasis. *Int J Dermatol* **34**(2):85-91, 1995
96. Hashim FA et al: Apparently successful treatment of two cases of post kala-azar dermal leishmaniasis with liposomal amphotericin B. *Trans R Soc Trop Med Hyg* 1995;**89**(4):440
97. Asilian A et al: Evaluation of CO laser efficacy in the treatment of cutaneous leishmaniasis. *Int J Dermatol* **43**(10):736-738, 2004
98. Zijlstra EE, el-Hassan AM, Ismael A: Endemic kala-azar in eastern Sudan: Post-kala-azar dermal leishmaniasis. *Am J Trop Med Hyg* **52**(4):299-305, 1995
99. Weiss F et al: Leishmania tropica-induced cutaneous and presumptive concomitant viscerotropic leishmaniasis with prolonged incubation. *Arch Dermatol* **145**(9):1023-1026, 2009
100. Berlin C: Leishmanide; Report of a case. *Br J Dermatol* **65**(7-8):265-268, 1953
101. Vega-Lopez F: Diagnosis of cutaneous leishmaniasis. *Curr Opin Infect Dis* **16**(2):97-101, 2003
102. Faber WR et al: Value of diagnostic techniques for cutaneous leishmaniasis. *J Am Acad Dermatol* **49**(1):70-74, 2003
103. Navin TR et al: Cutaneous leishmaniasis in Guatemala: Isoenzyme characterization of isolates from humans. *Am J Trop Med Hyg* **38**(1):50-51, 1988
104. Berger RS, Perez-Figaredo RA, Spielvogel RL: Leishmaniasis: The touch preparation as a rapid means of diagnosis. *J Am Acad Dermatol* **16**(5 Pt 2):1096-1105, 1987
105. Mehregan DR, Mehregan AH, Mehregan DA: Histologic diagnosis of cutaneous leishmaniasis. *Clin Dermatol* **17**(3):297-304, 1999
106. Kenner JR et al: Immunohistochemistry to identify Leishmania parasites in fixed tissues. *J Cutan Pathol* **26**(3):130-136, 1999
107. Oliveira-Neto MP et al: Leishmaniasis recidiva cutis in New World cutaneous leishmaniasis. *Int J Dermatol* **37**(11):846-849, 1998
108. Andresen K et al: Evaluation of the polymerase chain reaction in the diagnosis of cutaneous leishmaniasis due to Leishmania major: A comparison with direct microscopy of smears and sections from lesions. *Trans R Soc Trop Med Hyg* **90**(2):133-135, 1996
109. Rodriguez N et al: Molecular epidemiology of cutaneous leishmaniasis in Venezuela. *Trans R Soc Trop Med Hyg*. **96**(Suppl 1.):S105-S109, 2002
110. de Oliveira CI et al: Clinical utility of polymerase chain reaction-based detection of Leishmania in the diagnosis of American cutaneous leishmaniasis. *Clin Infect Dis* **37**(11):e149-e153, 2003
111. Antinori S et al: Clinical use of polymerase chain reaction performed on peripheral blood and bone marrow samples for the diagnosis and monitoring of visceral leishmaniasis in HIV-infected and HIV-uninfected patients: A single-center, 8-year experience in Italy and review of the literature. *Clin Infect Dis* **44**(12):1602-1610, 2007
112. Herwaldt BL: Leishmaniasis. *Lancet* **354**(9185):1191-1199, 1999
113. Weigle KA et al: Leishmanin skin test standardization and evaluation of safety, dose, storage, longevity of reaction and sensitization. *Am J Trop Med Hyg* **44**(3):260-271, 1991
114. Piscopo TV, Mallia AC: Leishmaniasis. *Postgrad Med J* **82**(972):649-657, 2006
115. Locksley RM, Louis JA: Immunology of leishmaniasis. *Curr Opin Immunol* **4**(4):413-418, 1992
116. Jaffe CL: Recent trends in vaccine development and immunization. *Clin Dermatol* **17**(3):339-344, 1999
117. Mendonca MG et al: Persistence of leishmania parasites in scars after clinical cure of American cutaneous leishmaniasis: Is there a sterile cure? *J Infect Dis* **189**(6):1018-1023, 2004

118. Belkaid Y et al: The role of interleukin (IL)-10 in the persistence of *Leishmania major* in the skin after healing and the therapeutic potential of anti-IL-10 receptor antibody for sterile cure. *J Exp Med* **194**(10):1497-1506, 2001
119. Dereure J et al: Visceral leishmaniasis. Persistence of parasites in lymph nodes after clinical cure. *J Infect* **47**(1):77-81, 2003
120. Croft SL, Coombs GH: Leishmaniasis—Current chemotherapy and recent advances in the search for novel drugs. *Trends Parasitol* **19**(11):502-508, 2003
121. Moskowitz PF, Kurban AK: Treatment of cutaneous leishmaniasis: Retrospectives and advances for the 21st century. *Clin Dermatol* **17**(3):305-315, 1999
122. Koff AB, Rosen T: Treatment of cutaneous leishmaniasis. *J Am Acad Dermatol* **31**(5 Pt 1):693-708; quiz 708-610, 1994
123. Sra KK, Sracic J, Tying SK: Treatment of protozoan infections. *Dermatol Ther* **17**(6):513-516, 2004
124. al-Majali O et al: A 2-year study of liquid nitrogen therapy in cutaneous leishmaniasis. *Int J Dermatol* **36**(6):460-462, 1997
125. Sharquie KE, al-Hamamy H, el-Yassin D: Treatment of cutaneous leishmaniasis by direct current electrotherapy: The Baghdadin device. *J Dermatol* **25**(4):234-237, 1998
126. Gonzalez U et al: Interventions for Old World cutaneous leishmaniasis. *Cochrane Database Syst Rev* (4):CD005067, 2008
127. Shazad B, Abbaszadeh B, Khamesipour A: Comparison of topical paromomycin sulfate (twice/day) with intralesional meglumine antimoniate for the treatment of cutaneous leishmaniasis caused by *L. major*. *Eur J Dermatol* **15**(2):85-87, 2005
128. Uzun S et al: Clinical features, epidemiology, and efficacy and safety of intralesional antimony treatment of cutaneous leishmaniasis: Recent experience in Turkey. *J Parasitol* **90**(4):853-859, 2004
129. Faghihi G, Tavakoli-kia R: Treatment of cutaneous leishmaniasis with either topical paromomycin or intralesional meglumine antimoniate. *Clin Exp Dermatol* **28**(1):13-16, 2003
130. Bogenrieder T et al: Treatment of Old World cutaneous leishmaniasis with intralesionally injected meglumine antimoniate using a Dermojet device. *Dermatology* **206**(3):269-272, 2003
131. Asilian A et al: Comparative study of the efficacy of combined cryotherapy and intralesional meglumine antimoniate (Glucantime) vs. cryotherapy and intralesional meglumine antimoniate (Glucantime) alone for the treatment of cutaneous leishmaniasis. *Int J Dermatol* **43**(4):281-283, 2004
132. Stanimirovic A et al: Treatment of cutaneous leishmaniasis with 20% paromomycin ointment. *J Eur Acad Dermatol Venereol* **13**(3):214-217, 1999
133. el-On J et al: Topical treatment of cutaneous leishmaniasis. *Br Med J (Clin Res Ed)* **291**(6504):1280-1281, 1985
134. Larbi EB et al: A randomized, double-blind, clinical trial of topical clotrimazole versus miconazole for treatment of cutaneous leishmaniasis in the eastern province of Saudi Arabia. *Am J Trop Med Hyg* **52**(2):166-168, 1995
135. Vardy D et al: Efficacious topical treatment for human cutaneous leishmaniasis with ethanolic lipid amphotericin B. *Trans R Soc Trop Med Hyg* **95**(2):184-186, 2001
136. Frankenburg S et al: Efficacious topical treatment for murine cutaneous leishmaniasis with ethanolic formulations of amphotericin B. *Antimicrob Agents Chemother* **42**(12):3092-3096, 1998
137. Zeina B, Banfield C, al-Assad S: Topical glyceryl trinitrate: A possible treatment for cutaneous leishmaniasis. *Clin Exp Dermatol* **22**(5):244-245, 1997
138. Sharquie KE: A new intralesional therapy of cutaneous leishmaniasis with hypertonic sodium chloride solution. *J Dermatol* **22**(10):732-737, 1995
139. Najim RA, Sharquie KE, Al-Zubaidy SA: Possible mechanisms of action of the compounds injected intralesionally in the treatment of cutaneous leishmaniasis, in addition to their direct effects on the parasites. *Ann Trop Med Parasitol* **100**(1):33-38, 2006
140. Al-Waiz M, Sharquie KE, Al-Assir M: Treatment of cutaneous leishmaniasis by intralesional metronidazole. *Saudi Med J* **25**(10):1512-1513, 2004
141. Seeberger J, Daoud S, Pammer J: Transient effect of topical treatment of cutaneous leishmaniasis with imiquimod. *Int J Dermatol* **42**(7):576-579, 2003
142. Khatami A et al: Treatment of acute Old World cutaneous leishmaniasis: A systematic review of the randomized controlled trials. *J Am Acad Dermatol* **57**(2):335 e331-e329, 2007
143. Palumbo E: Current treatment for cutaneous leishmaniasis: A review. *Am J Ther* **16**(2):178-182, 2009

144. Amato VS et al: Mucosal leishmaniasis. Current scenario and prospects for treatment. *Acta Trop* **105**(1):1-9, 2008
145. Sundar S et al: Single-dose liposomal amphotericin B for visceral leishmaniasis in India. *N Engl J Med* **362**(6):504-512
146. Dogra J, Saxena VN: Itraconazole and leishmaniasis: A randomised double-blind trial in cutaneous disease. *Int J Parasitol* **26**(12):1413-1415, 1996
147. Amato VS et al: Use of itraconazole in the treatment of mucocutaneous leishmaniasis: A pilot study. *Int J Infect Dis* **4**(3):153-157, 2000
148. Momeni AZ et al: Treatment of cutaneous leishmaniasis with itraconazole. Randomized double-blind study. *Arch Dermatol* **132**(7):784-786, 1996
149. Laffitte E, Genton B, Panizzon RG: Cutaneous leishmaniasis caused by *Leishmania tropica*: Treatment with oral fluconazole. *Dermatology* **210**(3):249-251, 2005
150. Jha BB: Fluconazole in visceral leishmaniasis. *Indian Pediatr* **35**(3):268-269, 1998
151. Alrajhi AA et al: Fluconazole for the treatment of cutaneous leishmaniasis caused by *Leishmania major*. *N Engl J Med* **346**(12):891-895, 2002
152. Sundar S, Olliaro PL: Miltefosine in the treatment of leishmaniasis: Clinical evidence for informed clinical risk management. *Ther Clin Risk Manag* **3**(5):733-740, 2007
153. Sundar S et al: Injectable paromomycin for Visceral leishmaniasis in India. *N Engl J Med* **356**(25):2571-2581, 2007
154. Sharquie KE et al: Oral zinc sulphate in the treatment of acute cutaneous leishmaniasis. *Clin Exp Dermatol* **26**(1):21-26, 2001
155. Najim RA, Sharquie KE, Farjou IB: Zinc sulphate in the treatment of cutaneous leishmaniasis: An in vitro and animal study. *Mem Inst Oswaldo Cruz* **93**(6):831-837, 1998
156. Sadeghian G, Nilforoushzadeh MA: Effect of combination therapy with systemic glucantime and pentoxifylline in the treatment of cutaneous leishmaniasis. *Int J Dermatol* **45**(7):819-821, 2006
157. de Moura FJ et al: Pentoxifylline prevents the meglumine antimonate-induced renal toxicity in rats, but not that induced by the inorganic antimony pentachloride. *Toxicology* **243**(1-2):66-74, 2008
158. Bahamdan KA et al: Terbinafine in the treatment of cutaneous leishmaniasis: A pilot study. *Int J Dermatol* **36**(1):59-60, 1997
159. Kassa-Kelembho E et al: First cases of imported cutaneous leishmaniasis in Bangui Central African Republic: Efficacy of metronidazole. *Med Trop (Mars)* **63**(6):597-600, 2003
160. Arranz-Caso JA et al: Metronidazole treatment in a patient with AIDS and visceral leishmaniasis. *AIDS* **9**(12):1377-1378, 1995
161. Osorio LE et al: Treatment of cutaneous leishmaniasis in Colombia with dapsone. *Lancet* **351**(9101):498-499, 1998
162. Dogra J: A double-blind study on the efficacy of oral dapsone in cutaneous leishmaniasis. *Trans R Soc Trop Med Hyg* **85**(2):212-213, 1991
163. Kolde G et al: Successful treatment of cutaneous leishmaniasis using systemic interferon-gamma. *Dermatology* **192**(1):56-60, 1996
164. Becker I et al: The efficacy of pentamidine combined with allopurinol and immunotherapy for the treatment of patients with diffuse cutaneous leishmaniasis. *Parasitol Res* **85**(3):165-170, 1999
165. Amato V et al: Treatment of mucocutaneous leishmaniasis with pentamidine isethionate. *Ann Dermatol Venereol* **125**(8):492-495, 1998
166. D'Oliveira Junior A, Machado PR, Carvalho EM: Evaluating the efficacy of allopurinol for the treatment of cutaneous leishmaniasis. *Int J Dermatol* **36**(12):938-940, 1997
167. Ramesh V: Allopurinol therapy in post-kala-azar dermal leishmaniasis. *Acta Derm Venereol* **76**(4):328-329, 1996
168. David M, Feuerman EJ: Cutaneous leishmaniasis treated with trimethoprim-sulfamethoxazol. *Harefuah* **92**(7):305-307, 1977
169. Kandil E: Treatment of cutaneous leishmaniasis with trimethoprim-sulfamethoxazole combination. *Dermatologica* **146**(5):303-309, 1973
170. Kochar DK et al: The role of rifampicin in the management of cutaneous leishmaniasis. *QJM* **93**(11):733-737, 2000
171. Marsden PD et al: Nifurtimox in the treatment of South American leishmaniasis. *Trans R Soc Trop Med Hyg* **73**(4):391-394, 1979
172. Guerra MF et al: Further trials of nifurtimox in mucocutaneous leishmaniasis. *Trans R Soc Trop Med Hyg* **75**(3):335-337, 1981
173. Fournet A et al: In vivo efficacy of oral and intralésional administration of 2-substituted quinolines in experimental treatment of new world cutaneous leishmaniasis caused by *Leishmania amazonensis*. *Antimicrob Agents Chemother* **40**(11):2447-2451, 1996

174. Neal RA: Effect of sodium stibogluconate and pyrimethamine on mouse infections with *Leishmania mexicana*. *Ann Trop Med Parasitol* **70**(2):252, 1976
175. de Oliveira-Silva F, de Morais-Teixeira E, Rabello A: Antileishmanial activity of azithromycin against *Leishmania (Leishmania) amazonensis*, *Leishmania (Viannia) braziliensis*, and *Leishmania (Leishmania) chagasi*. *Am J Trop Med Hyg* **78**(5):745-749, 2008
176. Sinagra A et al: The activity of azithromycin against *Leishmania (Viannia) braziliensis* and *Leishmania (Leishmania) amazonensis* in the golden hamster model. *Rev Soc Bras Med Trop* **40**(6):627-630, 2007
177. Krolewiecki AJ et al: A randomized clinical trial comparing oral azithromycin and meglumine antimoniate for the treatment of American cutaneous leishmaniasis caused by *Leishmania (Viannia) braziliensis*. *Am J Trop Med Hyg* **77**(4):640-646, 2007
178. Herwaldt BL, Berman JD: Recommendations for treating leishmaniasis with sodium stibogluconate (Pentostam) and review of pertinent clinical studies. *Am J Trop Med Hyg* **46**(3):296-306, 1992
179. Rojas R et al: Resistance to antimony and treatment failure in human leishmania (*viannia*) infection. *J Infect Dis* **193**(10):1375-1383, 2006
180. Sundar S et al: Failure of pentavalent antimony in visceral leishmaniasis in India: Report from the center of the Indian epidemic. *Clin Infect Dis* **31**(4):1104-1107, 2000
181. Thakur CP, Narayan S, Ranjan A: Epidemiological, clinical & pharmacological study of antimony-resistant visceral leishmaniasis in Bihar, India. *Indian J Med Res* **120**(3):166-172, 2004
182. Hadighi R et al: Unresponsiveness to glucantime treatment in Iranian cutaneous leishmaniasis due to drug-resistant *leishmania tropica* parasites. *PLoS Med* **3**(5):e162, 2006
183. Momeni AZ, Aminjavaheri M: Treatment of recurrent cutaneous Leishmaniasis. *Int J Dermatol* **34**(2):129-133, 1995
184. Martinez S, Marr JJ: Allopurinol in the treatment of American cutaneous leishmaniasis. *N Engl J Med* **326**(11):741-744, 1992
185. Momeni AZ, Reiszadae MR, Aminjavaheri M: Treatment of cutaneous leishmaniasis with a combination of allopurinol and low-dose meglumine antimoniate. *Int J Dermatol* **41**(7):441-443, 2002
186. Denerolle P, Bourdoiseau G: Combination allopurinol and antimony treatment versus antimony alone and allopurinol alone in the treatment of canine leishmaniasis (96 cases). *J Vet Intern Med* **13**(5):413-415, 1999
187. Thakur CP et al: A prospective randomized, comparative, open-label trial of the safety and efficacy of paromomycin (aminosidine) plus sodium stibogluconate versus sodium stibogluconate alone for the treatment of visceral leishmaniasis. *Trans R Soc Trop Med Hyg* **94**(4):429-431, 2000
188. Berman JD: Human leishmaniasis: Clinical, diagnostic, and chemotherapeutic developments in the last 10 years. *Clin Infect Dis* **24**(4):684-703, 1997
189. Silva-Vergara ML et al: Azithromycin in the treatment of mucosal leishmaniasis. *Rev Inst Med Trop Sao Paulo* **46**(3):175-177, 2004
190. Prata A et al: Efficacy of azithromycin in the treatment of cutaneous leishmaniasis. *Rev Soc Bras Med Trop* **36**(1):65-69, 2003
191. Krolewiecki A et al: Activity of azithromycin against *Leishmania major* in vitro and in vivo. *Am J Trop Med Hyg* **67**(3):273-277, 2002
192. Sundar S et al: Response to interferon-gamma plus pentavalent antimony in Indian visceral leishmaniasis. *J Infect Dis* **176**(4):1117-1119, 1997
193. Kurkcuoglu N, Tandogdu R: Interferon gamma therapy for cutaneous leishmaniasis. *Arch Dermatol* **126**(6):831-832, 1990
194. Bottasso O et al: Successful treatment of an antimony-resistant American mucocutaneous leishmaniasis: A case report. *Arch Dermatol* **128**(7):996-997, 1992
195. Almeida R et al: Randomized, double-blind study of stibogluconate plus human granulocyte macrophage colony-stimulating factor versus stibogluconate alone in the treatment of cutaneous Leishmaniasis. *J Infect Dis* **180**(5):1735-1737, 1999
196. Arevalo I et al: Successful treatment of drug-resistant cutaneous leishmaniasis in humans by use of imiquimod, an immunomodulator. *Clin Infect Dis* **33**(11):1847-1851, 2001
197. Miranda-Verastegui C et al: Randomized, double-blind clinical trial of topical imiquimod 5% with parenteral meglumine antimoniate in the treatment of cutaneous leishmaniasis in Peru. *Clin Infect Dis* **40**(10):1395-1403, 2005
198. Reyburn H et al: A randomized controlled trial of insecticide-treated bednets and chaddars or top sheets, and residual spraying of interior rooms

- for the prevention of cutaneous leishmaniasis in Kabul, Afghanistan. *Trans R Soc Trop Med Hyg* **94**(4):361-366, 2000
199. Requena JM et al: Recent advances in vaccines for leishmaniasis. *Expert Opin Biol Ther* **4**(9):1505-1517, 2004
200. Coler RN, Reed SG: Second-generation vaccines against leishmaniasis. *Trends Parasitol* **21**(5):244-249, 2005
201. Murray HW: Kala-azar—Progress against a neglected disease. *N Engl J Med* **347**(22):1793-1794, 2002
202. Armijos RX et al: Field trial of a vaccine against new world cutaneous leishmaniasis in an at-risk child population: How long does protection last? *J Infect Dis* **187**(12):1959-1961, 2003
203. Researchers home in on leishmaniasis vaccine. *Am J Vet Res* **62**(10):1517, 2001
204. Peters NC et al: Vector transmission of leishmania abrogates vaccine-induced protective immunity. *PLoS Pathog* **5**(6):e1000484, 2009
205. Ivens AC et al: The genome of the kinetoplastid parasite, *Leishmania major*. *Science* **309**(5733):436-442, 2005
206. El-Sayed NM et al: Comparative genomics of trypanosomatid parasitic protozoa. *Science* **309**(5733):404-409, 2005
207. Dillon RJ et al: A functional genomics project for the investigation of sandfly-leishmania interactions. *Arch Inst Pasteur Tunis* **82**:39, 2005
208. McGovern TW et al: Cutaneous manifestations of African trypanosomiasis. *Arch Dermatol* **131**(10):1178-1182, 1995
209. Moore AC, Ryan ET, Waldron MA: Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 20-2002. A 37-year-old man with fever, hepatosplenomegaly, and a cutaneous foot lesion after a trip to Africa. *N Engl J Med* **346**(26):2069-2076, 2002
210. Olowe SA: A case of congenital trypanosomiasis in Lagos. *Trans R Soc Trop Med Hyg* **69**(1):57-59, 1975
211. Rocha G et al: Possible cases of sexual and congenital transmission of sleeping sickness. *Lancet* **363**(9404):247, 2004
212. Brun R et al: Human African trypanosomiasis. *Lancet* **375**(9709):148-159
213. Faust SN et al: Sleeping sickness in brothers in London. *Pediatr Infect Dis J* **23**(9):879-881, 2004
214. Myrvang B, von der Lippe B: African trypanosomiasis—A rare imported disease. *Tidsskr Nor Laegeforen* **122**(1):33-34, 2002
215. Ripamonti D et al: African sleeping sickness in tourists returning from Tanzania: The first 2 Italian cases from a small outbreak among European travelers. *Clin Infect Dis* **34**(1):E18-E22, 2002
216. Ezzedine K et al: Skin features accompanying imported human African trypanosomiasis: Hemolymphatic *Trypanosoma gambiense* infection among two French expatriates with dermatologic manifestations. *J Travel Med* **14**(3):192-196, 2007
217. Kennedy PG: The continuing problem of human African trypanosomiasis (sleeping sickness). *Ann Neurol* **64**(2):116-126, 2008
218. Matete GO, Kajejo OA: Human African trypanosomiasis and human immunodeficiency virus co-infection in Western Kenya. *East Afr Med J* **82**(1):20-23, 2005
219. Jannin J, Cattand P: Treatment and control of human African trypanosomiasis. *Curr Opin Infect Dis* **17**(6):565-571, 2004
220. Papadopoulos MC et al: A novel and accurate diagnostic test for human African trypanosomiasis. *Lancet* **363**(9418):1358-1363, 2004
221. Kuboki N et al: Loop-mediated isothermal amplification for detection of African trypanosomes. *J Clin Microbiol* **41**(12):5517-5524, 2003
222. Chappuis F: Melarsoprol-free drug combinations for second-stage Gambian sleeping sickness: The way to go. *Clin Infect Dis* **45**(11):1443-1445, 2007
223. Priotto G et al: Nifurtimox-eflornithine combination therapy for second-stage African *Trypanosoma brucei gambiense* trypanosomiasis: A multicentre, randomised, phase III, non-inferiority trial. *Lancet* **374**(9683):56-64, 2009
224. La Forgia MP et al: Cutaneous manifestation of reactivation of Chagas disease in a renal transplant patient: Long-term follow-up. *Arch Dermatol* **139**(1):104-105, 2003
225. Control of Chagas disease. Report of a WHO Expert Committee. *World Health Organ Tech Rep Ser* **811**:1-95, 1991
226. Voelker R: A century after Chagas disease discovery, hurdles to tackling the infection remain. *JAMA* **302**(10):1045-1047, 2009
227. Torricio F et al: Are maternal re-infections with *Trypanosoma cruzi* associated with higher morbidity and mortality of congenital Chagas disease? *Trop Med Int Health* **11**(5):628-635, 2006

228. Riarte A et al: Chagas' disease in patients with kidney transplants: 7 years of experience 1989–1996. *Clin Infect Dis* **29**(3):561-567, 1999
229. Vazquez MC et al: Chagas disease and transplantation. *Transplant Proc* **28**(6):3301-3303, 1996
230. Carvalho MF, de Franco MF, Soares VA: Amastigotes forms of *Trypanosoma cruzi* detected in a renal allograft. *Rev Inst Med Trop Sao Paulo* **39**(4):223-226, 1997
231. Almeida DR et al: Chagas' disease reactivation after heart transplantation: Efficacy of allopurinol treatment. *J Heart Lung Transplant* **15**(10):988-992, 1996
232. Amato JG et al: Cutaneous lesions as the only manifestations of reactions to *Trypanosoma cruzi* infection in a recipient of a kidney transplant. *Rev Soc Bras Med Trop* **30**(1):61-63, 1996
233. Hyland KV, Engman DM: Further thoughts on where we stand on the autoimmunity hypothesis of Chagas disease. *Trends Parasitol* **22**(3):101-102; author reply 103, 2006
234. Cunha-Neto E et al: Induction of cardiac autoimmunity in Chagas heart disease: A case for molecular mimicry. *Autoimmunity* **39**(1):41-54, 2006
235. Urbina JA: Specific chemotherapy of Chagas disease: Relevance, current limitations and new approaches. *Acta Trop* **115**:55-68, 2010
236. Vago AR et al: Genetic characterization of *Trypanosoma cruzi* directly from tissues of patients with chronic Chagas disease: Differential distribution of genetic types into diverse organs. *Am J Pathol* **156**(5):1805-1809, 2000
237. Bern C et al: Evaluation and treatment of Chagas disease in the United States: A systematic review. *JAMA* **298**(18):2171-2181, 2007
238. Castro JA, Diaz de Toranzo EG: Toxic effects of nifurtimox and benznidazole, two drugs used against American trypanosomiasis (Chagas' disease). *Biomed Environ Sci* **1**(1):19-33, 1988
239. Wilkinson SR, Kelly JM: Trypanocidal drugs: Mechanisms, resistance and new targets. *Expert Rev Mol Med* **11**:e31, 2009
240. Moncayo A, Ortiz Yanine MI: An update on Chagas disease (human American trypanosomiasis). *Ann Trop Med Parasitol* **100**(8):663-677, 2006
241. Moncayo A: Progress towards the interruption of transmission of Chagas disease in the southern countries. *Medicina (B Aires)* **59**(Suppl. 2):120-124, 1999
242. Stanley SL Jr: Amoebiasis. *Lancet* **361**(9362):1025-1034, 2003
243. Parshad S et al: Primary cutaneous amoebiasis: Case report with review of the literature. *Int J Dermatol* **41**(10):676-680, 2002
244. Magana ML, Fernandez-Diez J, Magana M: Cutaneous amebiasis in pediatrics. *Arch Dermatol* **144**(10):1369-1372, 2008
245. Sanchez-Guillen Mdel C et al: Differentiation of entamoeba histolytica/entamoeba dispar by PCR and their correlation with humoral and cellular immunity in individuals with clinical variants of amoebiasis. *Am J Trop Med Hyg* **66**(6):731-737, 2002
246. Al-Daraji WI, Husain EA, Robson A: Primary cutaneous amebiasis with a fatal outcome. *Am J Dermatopathol* **30**(4):398-400, 2008
247. Adams EB, MacLeod IN: Invasive amebiasis. II. Amebic liver abscess and its complications. *Medicine (Baltimore)* **56**(4):325-334, 1977
248. Kenner BM, Rosen T: Cutaneous amebiasis in a child and review of the literature. *Pediatr Dermatol* **23**(3):231-234, 2006
249. Baez Mendoza J, Ramirez Barba EJ: Cutaneous amebiasis of the face: A case report. *Am J Trop Med Hyg* **35**(1):69-71, 1986
250. Abdus Sattar AB: An unusual cutaneous amoebic ulcer. *J Trop Med Hyg* **82**(9-10):201-202, 1979
251. Beaver PC et al: Cutaneous amebiasis of the eyelid with extension into the orbit. *Am J Trop Med Hyg* **27**(6):1133-1136, 1978
252. Ristic L: Urticaria in the course of amebiasis. *Acta Med Jugosl* **13**:363-369, 1959
253. Magana M et al: Histopathology of cutaneous amebiasis. *Am J Dermatopathol* **26**(4):280-284, 2004
254. Carter WW et al: Disseminated Acanthamoeba sinusitis in a patient with AIDS: A possible role for early antiretroviral therapy. *AIDS Read* **14**(1):41-49, 2004
255. Murakawa GJ, McCalmont T, Altman J et al: Disseminated acanthamebiasis in patients with AIDS. A report of five cases and a review of the literature. *Arch Dermatol* **131**(11):1291-1296, 1995
256. Marciano-Cabral F, Cabral G: Acanthamoeba spp. as agents of disease in humans. *Clin Microbiol Rev* **16**(2):273-307, 2003
257. Schuster FL: Cultivation of pathogenic and opportunistic free-living amebas. *Clin Microbiol Rev* **15**(3):342-354, 2002
258. el-Fakahany AF, Fahmy RR, Mohamed AS: Free living amoebae as opportunistic parasites in immunocompromised hosts. *J Egypt Soc Parasitol* **27**(2):515-527, 1997

259. Torno MS Jr et al: Cutaneous acanthamoebiasis in AIDS. *J Am Acad Dermatol* **42**(2 Pt 2):351-354, 2000
260. da Rocha-Azevedo B, Tanowitz HB, Marciano-Cabral F: Diagnosis of infections caused by pathogenic free-living amoebae. *Interdiscip Perspect Infect Dis* **2009**:251406, 2009
261. Paltiel M et al: Disseminated cutaneous acanthamebiasis: A case report and review of the literature. *Cutis* **73**(4):241-248, 2004
262. Galarza C et al: Cutaneous acanthamebiasis infection in immunocompetent and immunocompromised patients. *Intern J Dermatol* **48**:1324-1329, 2009
263. Rosenberg AS, Morgan MB: Disseminated acanthamoebiasis presenting as lobular panniculitis with necrotizing vasculitis in a patient with AIDS. *J Cutan Pathol* **28**(6):307-313, 2001
264. Baggett K, Grande K, Hsu S: Tender nodules on the legs of a cardiac transplant recipient. *Arch Dermatol* **136**(6):791, 794, 2000
265. Lee SA et al: Cutaneous toxoplasmosis: A case of confounding diagnosis. *Bone Marrow Transplant* **36**(5):465-466, 2005
266. Delaporte E et al: Cutaneous manifestations of toxoplasmosis. *Int J Dermatol* **34**(6):443, 1995
267. Mawhorter SD et al: Cutaneous manifestations of toxoplasmosis. *Clin Infect Dis* **14**(5):1084-1088, 1992
268. Mayes JT et al: Transmission of *Toxoplasma gondii* infection by liver transplantation. *Clin Infect Dis* **21**(3):511-515, 1995
269. Dodd RY: Transmission of parasites by blood transfusion. *Vox Sang* **74**(Suppl. 2):161-163, 1998
270. Martin S: Congenital toxoplasmosis. *Neonatal Netw* **20**(4):23-30, 2001
271. Surendrababu NR, Kuruvilla KA, Jana AK: Unusual pattern of calcification in congenital toxoplasmosis: The tram-track sign. *Pediatr Radiol* **36**(6):569, 2006
272. Epps RE, Pittelkow MR, Su WP: TORCH syndrome. *Semin Dermatol* **14**(2):179-186, 1995
273. Bonfioli AA, Orefice F: Toxoplasmosis. *Semin Ophthalmol* **20**(3):129-141, 2005
274. Hunter CA, Remington JS: Immunopathogenesis of toxoplasmic encephalitis. *J Infect Dis* **170**(5):1057-1067, 1994
275. Rongioletti F, Delmonte S, Rebora A: Pityriasis lichenoides and acquired toxoplasmosis. *Int J Dermatol* **38**(5):372-374, 1999
276. Lapetina F: Toxoplasmosis and dermatomyositis: A causal or casual relationship?. *Pediatr Med Chir* **11**(2):197-203, 1989
277. Schroter HM et al: Juvenile dermatomyositis induced by toxoplasmosis. *J Child Neurol* **2**(2):101-104, 1987
278. Topi GC et al: Dermatomyositis-like syndrome due to toxoplasma. *Br J Dermatol* **101**(5):589-591, 1979
279. Topi G et al: Acquired cutaneous toxoplasmosis. *Dermatologica* **167**(1):24-32, 1983
280. Midana A, Zina G, Pileri A: [Acquired toxoplasmosis in adults with cutaneous papulo-nodular manifestations]. *Bull Soc Fr Dermatol Syphiligr* **77**(3):333-334, 1970
281. Degos R et al: Acquired toxoplasmosis in an adult with a predominantly cutaneous form. *Bull Soc Fr Dermatol Syphiligr* **74**(6):748-750, 1967
282. Andreev VC, Angelov N, Zlatkov NB: Skin manifestations in toxoplasmosis. *Arch Dermatol* **100**(2):196-199, 1969
283. Nassef NE, Hammam MA: The relation between toxoplasmosis and pityriasis lichenoides chronica. *J Egypt Soc Parasitol* **27**(1):93-99, 1997
284. Rongioletti F, Rivara G, Rebora A: Pityriasis lichenoides et varioliformis acuta and acquired toxoplasmosis. *Dermatologica* **175**(1):41-44, 1987
285. Zlatkov NB, Andreev VC: Toxoplasmosis and pityriasis lichenoides. *Br J Dermatol* **87**(2):114-116, 1972
286. Delfino M et al: Sweet's syndrome and toxoplasmosis: A coincidental association? *Dermatologica* **171**(2):102-105, 1985
287. Miralles Lopez JC et al: Cold urticaria associated with acute serologic toxoplasmosis. *Allergol Immunopathol (Madr)* **33**(3):172-174, 2005
288. Fernandez DF, Wolff AH, Bagley MP: Acute cutaneous toxoplasmosis presenting as erythroderma. *Int J Dermatol* **33**(2):129-130, 1994
289. Solovastru L, Amalinei C: Morphea associated with toxoplasmosis. *Rev Med Chir Soc Med Nat Iasi* **107**(3):646-649, 2003
290. Koepfel MC et al: Cutaneous and gastrointestinal mastocytosis associated with cerebral toxoplasmosis. *Br J Dermatol* **139**(5):881-884, 1998
291. Menter MA, Morrison JG: Lichen verrucosus et reticularis of Kaposi (porokeratosis striata of Nekam): A manifestation of acquired adult toxoplasmosis. *Br J Dermatol* **94**(6):645-654, 1976

292. Leblanc T et al: Acute disseminated multinodular non-recurrent adiponecrosis. Cutaneous manifestations of recent toxoplasmosis. *Arch Fr Pediatr* **46**(9):679-680, 1989
293. Binazzi M, Papini M: Cutaneous toxoplasmosis. *Int J Dermatol* **19**(6):332-335, 1980
294. Pendry K et al: Toxoplasmosis after BMT for CML. *Bone Marrow Transplant* **5**(1):65-66, 1990
295. Chandrasekar PH, Momin F: Disseminated toxoplasmosis in marrow recipients: A report of three cases and a review of the literature. Bone Marrow Transplant Team. *Bone Marrow Transplant* **19**(7):685-689, 1997
296. Arnold SJ et al: Disseminated toxoplasmosis. Unusual presentations in the immunocompromised host. *Arch Pathol Lab Med* **121**(8):869-873, 1997
297. Vidal CI et al: Cutaneous toxoplasmosis histologically mimicking graft-versus-host disease. *Am J Dermatopathol* **30**(5):492-493, 2008
298. Amir G et al: Cutaneous toxoplasmosis after bone marrow transplantation with molecular confirmation. *J Am Acad Dermatol* **59**(5):781-784, 2008
299. Leyva WH, Santa Cruz DJ: Cutaneous toxoplasmosis. *J Am Acad Dermatol* **14**(4):600-605, 1986
300. Cermakova Z, Ryskova O, Pliskova L: Polymerase chain reaction for detection of *Toxoplasma gondii* in human biological samples. *Folia Microbiol (Praha)* **50**(4):341-344, 2005
301. Contini C: Clinical and diagnostic management of toxoplasmosis in the immunocompromised patient. *Parassitologia* **50**(1-2):45-50, 2008
302. Antinori A et al: Diagnosis of AIDS-related focal brain lesions: A decision-making analysis based on clinical and neuroradiologic characteristics combined with polymerase chain reaction assays in CSF. *Neurology* **48**(3):687-694, 1997
303. Antoniazzi E et al: Ocular impairment of toxoplasmosis. *Parassitologia* **50**(1-2):35-36, 2008
304. Alavi SM, Alavi L: Treatment of toxoplasmic lymphadenitis with co-trimoxazole: Double-blind, randomized clinical trial. *Int J Infect Dis* **14**: e67-69, 2010

