

REFERENCES

- Aberle, S.W., C.W. Mandl, C. Kunz and T. Popow-Kraupp. 1996. Presence of human herpesvirus 6 variants A and B in saliva and peripheral blood mononuclear cells of healthy adults. *J. Clin. Microbiol.* 34 : 3223-3225.
- Ablashi, D.V., S.F. Josephs, A. Buchbinder, K. Hellman, S. Nakamura, T. Llana, P. Lusso, M. Kaplan, J. Dahlbreg, S. Memon, F. Imam, K.L. Ablashi, P.D. Markham, B. Kramarsky, S.F. Josephs, P. Biberfeld, F. Wong-Staal, S.Z. Salahuddin and R.C. Gallo. 1988. Human T-lymphotrophic virus (human herpes virus 6). *J. Virol. Methods* 21: 29-48.
- Ablashi, D.V., N. Balachandran, S.F. Josephs, C.L. Hung, B. Kramarsky, S.Z. Salahuddin, and R.C. Gallo. 1991. Genomic polymorphism, growth properties and immunologic variations in human herpes virus 6 isolates. *Virology* 184 : 545-552.
- Ablashi, D.V., S. Marsh, M. Kaplan, J.E. Whitman Jr, and G.R. Pearson. 1998. HHV6 infection in HIV-infected asymptomatic and AIDS patients. *Intervirology* 41 : 1-9.
- Abu-Samah, A.J. 1996. Antigenic peptides of Epstein-barr early antigen in nasopharyngeal carcinoma. M. Phil. Thesis, University of Malaya.
- Amerongen, A., H.H. Plasman and D. Kuperus. 1994. Characterization of peptide sequences from beta-human chorionic gonadotrophin reactive with monoclonal antibodies: Improvement of peptide affinities by specific amino acid replacements. *Peptide Res.* 7 : 83.
- Adams, O., C. Krempe, G. Kogler, P. Wernet, and A. Scheid. 1998. Congenital infections with HHV6. *J. Infect. Dis.* 178 : 544-546.
- Asano, Y., T. Yoshikawa, S. Suga, T. Yazaki, S. Hirabayashi, Y. Ono, K. Tsuzuki and S. Oshima. 1989. Human herpesvirus 6 harbouring in kidney. *Lancet* 335 : 1391.
- Asano, Y., T. Yoshikawa, S. Suga, T. Yazaki, Y. Kondo and K. Yamanishi. 1990. Fatal fulminant hepatitis in an infant with human herpes virus 6 infection. *Lancet* 335 : 862-863.
- Asano, Y., T. Nakashima, T. Yoshikawa, S. Suga and T. Yazaki. 1991. Severity of human herpesvirus 6 viremia and clinical findings in infants with exanthem subitum. *J. Pediatr.* 118 : 891-895.
- Asano, Y., T. Yoshikawa, Y. Kajita, R. Ogura, S. Suga, T. Yazaki, T. Nakashima, A. Yamada and A. Kurata, A. 1992. Fatal encephalitis/encephalopathy in primary human herpesvirus-6 infection. *Arch Dis. Child.* 67 : 1484-1485 .

- Asano, Y., T. Yoshikawa, S. Suga, I. Kobayashi, T. Nakashima, T. Yazaki. 1994. Clinical features of infants with primary HHV6 infection (exanthem subitum, roseola infantum). *Pediatrics* 93 : 104-108.
- Araujo, J.C., J. Doniger, F.Kashanchi, P.L. Hermonat, J. Thompson and L.J. Rosenthal. 1995. Human herpesvirus 6A suppresses both transformation by H-ras and transcription by the H-ras and human immunodeficiency virus type 1 promoters. *J. Virol.* 69 : 4933-4940.
- Aubin, J.T., H. Collandre, D. Candotti, D. Ingrand, C. Rouzioux, M. Burgard, M, S. Richard, J.M. Huraux and H. Agut. 1991. Several groups among human herpes virus 6 strains can be distinguished by Southern blotting and polymerase chain reaction. *J. Clin. Microbiol.* 29 : 367-372.
- Aubin, J.T., L. Poirel, H. Agut, J.M.Huraux, C. Bignozzi, Y. Brossard, N. Muilliez, J. Roume, F. Lecuru and R. Taurelle. 1992. Intrauterine transmission of human herpesvirus 6. *Lancet* 340 : 482-483.
- Aubin, J.T., H. Agut, H. Collandre, K. Yamanishi, B. Chandran, L. Montagnier and J.M. Huraux. 1993. Antigenic and genetic differentiation of the two putative types of HHV6. *J. Virol. Methods* 41 : 223-234.
- Balachandran, N., R.E. Amelse, W.W. Zhou and C.K. Chang. 1989. Identification of proteins specific for human herpesvirus 6- infected human T-cells. *J. Virol.* 63 : 2835-2840.
- Balachandran, N., P. Bowonkiratinakikachorn, B. Poovijit, A. Thattiyapong, C. Jayavas, C. Wasi, M. Takahashi and K. Yamanishi. 1991a. Human herpesvirus 6 infection and exanthem subitum in Thailand. *Acta Paediatr. Jpn.* 33 : 434-439.
- Balachandran, N., S. Tirawatnapong, B. Pfeiffer, D.V. Ablashi, D.V. and S.Z. Salahuddin. 1991b. Electrophoretic analysis of human herpesvirus 6 polypeptides immunoprecipitated from infected cells with human sera. *J. Infect. Dis.* 163 : 29-34.
- Barlow, D.J, M.S. Edwards and J.M. Thornton. 1986. Continuous and discontinuous protein antigenic determinants. *Nature* 322 : 747-748.
- Benjamin, D.C., J.A. Berzofsky, I.J. East, F.R.N. Gurd, C. Hannum, S.J. Leach, E. Margoliash, J.G. Michael, A. Miller, E.M. Prager, M. Reichlin, E.E. Secarz, S.J. Smith-Gill, P.E. Todd and A.C. Wilson. 1984. The antigenic structure or proteins: a reappraisal. *Ann. Rev. Immunol.* 2 : 67-101.
- Benjamini, E., Seibienski and E. Thompson. 1972. The relationship between antigenic structure and immune specificity. *In: Contemporary Topics in Immunochemistry Vol. 1.* Inman, F.P. (ed) Plenum Press, New York, London pp.15-49.

- Berzofsky, J.A.** 1985. Intrinsic and extrinsic factors in protein antigenic structure. *Science* 229 : 932-940.
- Berzofsky, J.A. and I.J. Berkower.** 1993. Immunogenicity and antigenic structure. *In: Fundamental Immunology* 3rd ed. (eds) William E. Paul. Raven Press Ltd., New York.
- Berneman, Z.N., D.V. Ablashi, G. Li, M. Eger-Fletcher, M.S. Reitz Jr., C.L. Hung, I. Brus, A.L. Komaroff and R.C. Gallo.** 1992. Human herpesvirus 7 is a T-lymphotrophic virus and is related to, but significantly different from, human herpesvirus 6 and human cytomegalovirus. *Proc. Natl. Acad. Sci. USA* 89 : 10552-10556.
- Bovenzi, P., P. Mirandola, P. Secchiero, R. Strumia, E. Cassai and D. Di Luca.** 1993. Human herpesvirus 6 (variant A) in Kaposi's sarcoma. *Lancet* 341: 1288-1289.
- Briggs, M., J. Fox and R.S. Tedder.** 1988. Age prevalence of antibody to HHV6. *Lancet* I : 1058-1059.
- Brown, C.S., T. Jansen and R.H. Melen.** 1992. Localization of an immunodominant domain on baculovirus-produced parvovirus B19 capsids: correlation to a major surface region on the native virus particle. *J. Virol.* 66 : 6989-6991.
- Breese-Hall, C., C.E. Long, K. Schnabel, M.T. Caserta, K.M. McIntyre, M.A. Constanzo, A. Knott, S. Dewhurst, R.A. Insel and L.G. Epstein.** 1994. Human herpesvirus 6 infection in children: A prospective study of complication and reactivation. *N. Engl. J. Med.* 331: 432-438.
- Buchwald , D., P.R. Cheney, D.L. Peterson, B. Henry, S.B. Wormsley, A. Geiger, D.V. Ablashi, S.Z. Salahuddin, C. Saxinger, R. Biddie and A. Komaroff.** 1992. A chronic illness characterized by fatigue , neurologic and immunologic disorders, and active human herpesvirus type 6 infection. *Ann. Intern. Med.* 116 : 103-113.
- Buchwald, D., R.L. Ashley, T. Pearlman, P. Kith and A.L. Komaroff.** 1996. Viral serologies in patients with chronic fatigue and chronic fatigue syndrome. *J. Med. Virol.* 50 : 25-30.
- Burnie, J.P. and A. Al. Dughaym.** 1996. The application of epitope mapping in the development of a new serological test for *Helicobacter pylori* infection. *J. Immuno. Methods.* 194 : 85-94.
- Carrigan, D.R., K.K. Knox and M.A. Tapper.** 1990. Suppression of human immunodeficiency virus type 1 replication by human herpes virus 6. *J. Infect. Dis.* 162 : 844-851.

- Challoner, P.B., K.T. Smith, J.D. Parker, D.L. Macleod, S.N. Coulter, T.M. Rose, E.R. Schultz, J.L. Bennett, R.L. Garber and M. Chang.** 1995. Plaque associated expression of HHV6 in multiple sclerosis. *Proc. Natl. Acad. Sci. USA* 92 : 7440-7444.
- Chan, P.K.S., J.S.M. Peires, K.Y. Yen, R.H.S. Liang, Y.L. Lau, F.E. Chen, S.K.F. Lo, C.Y. Cheung, T.K. Chan and M.H. Ng.** 1997. HHV6 and HHV7 infections in bone marrow transplant recipients. *J. Med. Virol.* 53 : 295-305.
- Chang, C.K. and N. Balachandran.** 1991. Identification, characterization, and sequence analysis of a cDNA encoding a phosphoprotein of human herpes virus 6. *J. Virol.* 65 : 2884-2894.
- Chen, M., H. Wang, Z. Berneman, P. Lusso, D.V. Ablashi and J.A. DiPaolo.** 1994. Detection of human herpesvirus 6 and human papillomavirus 16 in cervical carcinoma. *Am. J. Pathol.* 145 : 1509-1516.
- Cheng, H.M., Y.T. Foong, A.J. Abu Samah, J. Dillner, C.K. Sam and U. Prasad.** 1995. Linear epitopes of the replication activator protein of EBV-recognized by specific IgG in nasopharyngeal carcinoma. *Cancer Immunol. Immunother.* 40 : 251-256.
- Chou, S. and G.I. Marousek.** 1992. Homology of the envelope glycoprotein b of the human herpes virus 6 and cytomegalovirus. *Virology* 191: 523-528.
- Chua, K.B., N.S. Khairullah and P.S. Hooi.** 1996. Seroepidemiology of human herpesvirus 6 in a population seen in the University Hospital, Kuala Lumpur, Malaysia. *Southeast Asian J. Trop. Med. Public Health.* 27 : 91-95.
- Chua, K.H.** 1999. Epstein Barr (EBV) and human herpes 6 (HHV-6) seroconversion profiles in Malaysian children and young adults. M. Biotech thesis. University of Malaya.
- Crumpton, M.J.** 1974. Protein antigens: the molecular bases of antigenicity and immunogenicity *In*: Sela, M. ed. *The Antigens Vol. II* New York Academic Press pp. 1-79.
- Cone, R.W., M.L. Huang, R. Ashley and L. Corey.** 1993. Human herpesvirus 6 DNA in peripheral blood cells and saliva from immunocompetent individuals. *J. Clin Microbiol.* 31: 1262-1267.
- Cone, R.W., M.L. Huang, R.C. Hackman and L. Corey.** 1996. Coinfection with human herpesvirus 6 variants A and B in lung tissue. *J. Clin. Microbiol.* 34 : 877-881.
- Copeland, R.A.** 1994. *In Methods for protein analysis : A practical guide to Laboratory protocol.* 1-16.

- Connolly, M.L.** 1983. Solvent accessible surfaces of proteins and nucleic acids. *Science* 221 : 709-713
- Coyle, P.V., M. Briggs, R. Tedder and J. Fox.** 1992. Comparison of three immunossays for the detection of anti HHV6. *J. Virol. Meth.* 38 : 283-295.
- Cuende, J.I., J. Ruiz, M.P. Civeira and J. Prieto.** 1994. High prevalence of HHV6 DNA peripheral blood mononuclear cells of healthy individuals detected by nested PCR. *J. Med. Virol.* 43 : 115-118.
- Dahl, H., A. Linde, V.A. Sundqvist and B. Wahren.** 1990. An enzyme-linked immunosorbent assay for IgG antibodies to HHV6. *J. Virol. Methods* 29 : 313-324.
- De Freitas, R.B. and A.C. Linhares.** 1997. Prevalence of HHV6 antibody in the population of Belem, Para, northern Brazil. *Trans. R. Soc. Trop. Med. Hyg.* 91: 538-540.
- Descamps, V., F. Bouscarat, S. Laglenne, E. Aslangul, B. Veber, D. Descamps, J.L. Saraux, M.J. Grange, M. Grossin, E. Navratil, B. Crickx and S.S. Belaich.** 1997. HHV6 infection associated with anticonvulsant hypersensitivity syndrome and reactive haemophagocytic syndrome. *Br. J. Dermatol.* 137 : 605-608.
- Dewhurst, S., B. Chandran, K. McIntyre, K. Schnabel and C.B. Hall.** 1992. Phenotypic and genetic polymorphisms among HHV6 isolates from North America. *Virology* 190 : 490-493.
- Dewhurst, S., S.C. Dollard, P.E. Pellett and T.R. Dambaugh.** 1993a. Identification of a lytic-phase origin of DNA replication in human herpesvirus 6B (strain Z29) *J. Virol.* 67 : 7680-7683.
- Dewhurst, S., K. McIntyre, K. Schnabel and C.B. Hall.** 1993b. Human herpesvirus 6 (HHV-6) variant B accounts for the majority of symptomatic primary HHV-6 infections in a population of U.S. infants. *J. Clin. Microbiol.* 31: 416-418.
- Di Luca, D., P. Mirandola, P. Secchiero, C. Cermelli, A. Aleotti, P. Bovenzi, M. Portolani and E. Cassai.** 1992. Characterization of human herpes virus 6 strains isolated from patients with exanthem subitum with or without cutaneous rash. *J. Infect. Dis.* 166 : 689.
- Di Luca, D., R. Dolcetti, P. Mirandola, V. De Re, P. Secchiero, A. Carbone, M. Boiocchi and E. Cassai.** 1994. Human herpesvirus 6. A survey of presence and variant distribution in normal peripheral lymphocytes and lymphoproliferative disorders. *J. Infect. Dis.* 170 : 211-215.

- Di Luca, D., M. Zorzenon, P. Mirandola, R. Colle, G.A. Botta and E. Cassai.** 1995a. Human herpesvirus 6 and human herpesvirus 7 in chronic fatigue syndrome. *J. Clin. Microbiol.* 33 : 1660-1661.
- Di Luca, D., P. Mirandola, T. Ravaoli, R. Dolcetti, A. Frigatti, P. Bovenzi, L. Sighinolfi, P. Monini and E. Cassai.** 1995b. Human herpesvirus 6 and 7 in salivary glands and shedding in saliva of healthy and human immunodeficiency virus positive individuals. *J. Med. Virol.* 45 : 462-486.
- Di Luca, D., P. Mirandola, T. Ravaoli, B. Bigoni and E. Cassai.** 1996. Distribution of HHV6 in human tissues. *J. Infect. Dis.* 5 : 203-214.
- Dockrell, D.H., J. Prada, M.F. Jones, R. Patel, A.D. Badley, W.S. Harmsen and D.M. Ilstrup.** 1997. Seroconversion to HHV6 following liver transplantation is a marker of cytomegalovirus disease. *J. Infect. Dis.* 176 : 1135-1140.
- Downing, R.G., N. Sewankambo, D. Serwadda, R. Honess, D. Crawford, R. Jarrett and B.E. Griffin.** 1987. Isolation of human lymphotropic herpes virus from Uganda. *Lancet* 2 : 390.
- Drobyski, W.R., K.K. Knox, D. Majewski and D.R. Carrigan.** 1994. Fatal encephalitis due to variant B humanherpesvirus infection in a bone marrow transplant recipient. *N. Engl. J. Med.* 330 : 1356-1360.
- Drobyski, W.R., W.M. Dunne, E.M. Burd, K.K. Knox, R.C. Ash, M.M. Horowitz, N. Flomenberg and D.R. Carrigan.** 1993. Human herpesvirus-6 (HHV-6) infection in allogeneic bone marrow transplant recipients: evidence of a marrow-suppressive role for HHV-6 *in vivo*. *J. Infect. Dis.* 167 : 735-739.
- Dunne, W.M. and G.J. Demmler.** 1992. Serological evidence for congenital transmission of HHV6. *Lancet* 340 : 121-122.
- Dunne, W.M. and M. Jevon.** 1993. Examination of human breast milk for evidence of HHV6 by polymerase chain reaction. *J. Infect. Dis.* 168 : 250.
- Dworsky, M., M. Yow, S. Stagno, R.F. Pass and C. Alford.** 1983. Cytomegalovirus infection of breast milk and transmission in infancy. *Pediatrics* 72 : 295-299.
- Enders, G., M. Biber, G. Meyer and E. Helftenbien.** 1990. Prevalence of antibodies to human herpesvirus 6 in different age groups, in children with exanthem subitum, other acute exanthematous childhood diseases, Kawasaki Syndrome, and acute infections with other herpesvirus and HIV. *Infection* 18 : 20-23.

- Farr, T.J., G.B. Harnett, G.R. Pietroboni and M.R. Bucens. 1990. The distribution of antibodies to HHV6 compared with other herpesviruses in young children. *Epidemiol. Infect.* 105 : 613-607.
- Fillet, A.M., M. Raphael, B. Visse, J. Audouin, L. Poirer and H. Agut. 1995. Controlled study of human herpesvirus 6 detection in acquired immunodeficiency syndrome associated non-Hodgkin's lymphoma. *J. Med. Virol.* 45 : 106-112.
- Foa-Tomasi, L., A. Broscaro, S. Digaeat and G. Campadellifume. 1991. Monoclonal antibodies to gp 100 inhibit penetration of HHV6 and polykaryote formation in susceptible cells. *J. Virol.* 65: 4124-4129.
- Fox, J.D., M. Briggs, P.A. Ward and R.S. Tedder. 1990. Human herpesvirus 6 in salivary glands. *Lancet* 336 : 590-593.
- Fujioka, K., K. Ueda, C. Miyazaki, K. Okada, K. Kusuhara, Y. Hidaka, K. Tokugawa and S. Kashiwagi. 1994. Influence of refrain from breast feeding on acquisition of natural cytomegalovirus immunity in an endemic area of HTLV-1. *Acta Pediatr. Jpn.* 36 : 457-459.
- Fujisaki, H., K. Tanaka-Taya, H. Tanabe, T. Hara, H. Miyoshi, S. Okada and K. Yamanishi. 1998. Detection of HHV7 DNA in breast milk by PCR and prevalence of HHV7 in breast-fed and bottle-fed children. *J. Med. Virol.* 56 : 275-279.
- Furukawa, M., M. Yasukawa, Y. Yakushijin and S. Fujita. 1994. Distinct effects of human herpesvirus 6 and human herpesvirus 7 on surface molecule expression and function of CD4+ T cells. *J. Immunol.* 152 : 5768-5775.
- Gallet, X., N. Benhabiles., M. Lewin., R. Brassue., A. Thomas-Soumarmon. 1995. Prediction of the antigenic sites of the cystic fibrosis transmembrane conductance regulator protein by molecular modelling. *Prt. Eng.* 8 : 829-834
- Gautheret, A., J.T. Aubin, V. Fauveau, W. Rozenbaum, J.M. Huraux and H. Agut. 1995. Rate of detection of HHV6 at different stages of HIV infection. *Eur. J. Clin. Microbiol. Infect.* 14 : 820-824.
- Getzoff, E.D., J.A. Tainer, R.A. Lerner and H.M. Geysen. 1988. The chemistry and mechanisms of antibody binding to protein antigens. *Adv. Immunol.* 43 : 1-98.
- Geysen, H.M., R.H. Moleon and S.J. Bartelling. 1984. Use of peptide synthesis to probe viral antigens for epitopes to a resolution of a single amino acid. *Proc. Natl. Acad. Sci. USA* 81: 3998-4002.

- Geysen, H.M., T.J. Mason, S.J. Rodda, R.H. Meleon and S.J. Bartelling.** 1985. Amino acid composition of antigenic determinants : Implication for antigen processing by the immune system of animals. In "Vaccines 95" (R.A. Lerner, R.M. Channock and F. Brown , eds), pp. 133-137. Cold-Spring Harbor Laboratory, New York.
- Geysen, H.M., S.J. Rodda and T.J. Mason.** 1986. The delineation of peptides able to mimic assembled epitopes. In: R. Porter and J. Wheelan (eds) *Synthetic Peptides as Antigens*. Ciba Foundation Symposium 119, pp 130-149. Wiley, Chichester.
- Geysen, H.M., S.J. Rodda, T.J. Mason, G. Tribbick and P.G. Schoofs.** 1987. Strategies for epitope analysis using peptide synthesis. *J. Immunol. Methods* 102 : 259-274.
- Gompels, U.A. and H. Macaulay.** 1995. Characterization of human telomeric repeat sequences from human herpesvirus 6 and relationship to replication. *J. Gen. Virol.* 76 : 451-458.
- Gompels, U.A., D.R. Carrigan, A.L. Carss and J. Arno.** 1993. Two groups of human herpes virus 6 identified by sequence analyses of laboratory strains and variants from Hodgkin's lymphoma and bone marrow transplant patients. *J. Gen. Virol.* 74 : 613-622.
- Gompels, U.A., J. Nicholas, G. Lawrence, M. Jones, B.J. Thomson, M.E. Martin, S. Efstathiou, M. Craxton and H.A. Macaulay.** 1995. The DNA sequence of human herpesvirus 6 :structure, coding content and genome evolution. *Virology* 209 : 29-51.
- Gopal, M.R., B.J. Thomson, J. Fox, R.S. Tedder and R.W. Honess.** 1990. Detection of PCR of HHV6 and EBV DNA in blood and oropharynx of healthy adults and HIV seropositives. *Lancet* I : 1598-1599.
- Hall, C.B., C.E. Long, K.C. Schnabel, M.T. Caserta, K.M. McIntyre, M.A. Costanzo, A. Knott, S. Dewhurst, R.A. Insel and L.G. Epstein.** 1994. Human herpesvirus-6 infection in children. A prospective study of complications and reactivation. *N. Engl. J. Med.* 331 : 432-438.
- Hall, C.B., M.T. Caserta, K.C. Schnabel, C. Long, L.G. Epstein, R.A. Insel and S. Dewhurst.** 1998. Persistence of HHV6 according to site and variant : possible greater neurotropism of variant A. *Clin. Infect. Dis.* 26 : 132-137.
- Harnett, G.B., T.J. Farr, G.R. Pietroboni and M.R. Bucens.** 1990. Frequent shedding of human herpes virus 6 in saliva. *J. Med. Virol.* 30 : 128-130.

- Hidaka, Y., Y. Liu, M. Yamamoto, R. Mori, C. Miyazaki, K. Kusuhara, K. Okada and K. Ueda.** 1993. Frequent isolation of HHV7 from saliva samples. *J. Med. Virol.* 40 : 343-346.
- Hopp, T.P. and K.R. Woods.** 1981. Prediction of protein antigenic determinants from amino acid sequences. *Proc. Natl. Acad. Sci. USA* 78 : 3824-3828.
- Hopp, T.P. and K.R. Woods.** 1983. A computer program for predicting antigenic determinants. *Mol. Immunol.* 20 : 483-489.
- Houghten, R.A.** 1985. General method for the rapid solid phase synthesis of a large number of peptides : Specificity of antigen-antibody reactions at the level of individual amino acids. *Proc. Natl. Acad. Sci. USA* 82 : 5131.
- Huang, L.M., C.T. Lee, K.H. Lin, W.M. Chuu, P.I. Lee, R.L. Chen, J.M. Chen and D.T. Lin.** 1990. Human herpesvirus 6 associated with fatal haemophagocytic syndrome. *Lancet* 336 : 60-61.
- Huang, L.M., C.Y. Lee, J.Y. Chen, C.S. Yang, J.D. Wang and M.H. Chang.** 1992. Primary HHV6 in children : A prospective serologic study. *J. Infect. Dis.* 165 : 1163-1164.
- Hukin, J., K. Farrel, L.M. MacWilliam, M. Colbourne, E. Waida, R. Tan, L. Mroz and E. Thomas.** 1998. Electronic article: case control study of primary HHV6 infection in children with febrile seizures. *Pediatrics* 101: 1-13.
- Inagi, R., R. Guntapong, M. Nakao, Y. Ishino, K. Kawanishi, Y. Isegawa and K. Yamanishi.** 1996. HHV6 induces IL-8 gene expression in human hepatoma cell line, Hep G2. *J. Med. Virology* 49 : 34-40.
- Irving, W.L. and A.L. Cunningham.** 1990. Serological diagnosis of infection with HHV6. *Br. Med. J.* 300 : 156-159.
- Jarrett, R.F., A. Gallagher, S. Gledhill, M.D. Jones, I. Teo, B.E. Griffin.** 1989. Variation in restriction map of HHV6 genome. *Lancet* I : 448-449.
- Jarrett, R.F., D.A. Clark, S.F. Josephs and D.E. Onions.** 1990. Detection of human herpesvirus 6 DNA in peripheral blood and saliva. *J. Med. Virol.* 32 : 73-76.
- Jee, S.H., C.E. Long, K.C. Schanabel, N. Sehgal, L.G. Epstein and C. Breese-Hall.** 1998. Risk of seizures after a primary HHV6-induced febrile seizure. *Pediatr. Infect. Dis. J.* 17 : 43-48.

- Katsafanas, G.C., E.C. Schirmer, L.S. Wyatt and N. Frenkel.** 1996. *In vitro* activation of HHV6 and HHV7 from latency. Proc. Natl. Acad. Sci. USA 93 : 9788-9792.
- Kido, S., K. Kondo, T. Kondo, T. Morishima, M. Takahashi and K. Yamanishi.** 1990. Detection of human herpesvirus 6 DNA in throat swabs by polymerase chain reaction. J. Med. Virol. 32 : 139-142.
- Kikuta, H., H. Lu, S. Matsumoto, S.F. Josephs and R.C. Gallo.** 1989. Polymorphism of human herpes virus 6 DNA from five Japanese patients with exanthem subitum. J. Infect. Dis. 160 : 550-551.
- Kikuta, H., H. Lu, K. Tomizawa and S. Matsumoto.** 1990. Enhancement of human herpesvirus 6 replication in adult human lymphocytes by monoclonal antibody to CD3. J. Infect. Dis. 161 : 1085-1087.
- Knowles, W.A. and S.D. Gardner.** 1988. High prevalence of antibody to HHV6 and seroconversion associated with rash in two infants. Lancet ii : 912-913.
- Knox, K.K. and D.R. Carrigan.** 1994. Disseminated and active infections by human herpesvirus in patients with AIDS. Lancet 343 : 577-578.
- Knox, K.K. and D.R. Carrigan.** 1996. Chronic myelosuppression associated with persistent bone marrow infection due to HHV6 in a bone marrow transplant recipient. Clin. Infect. Dis. 22 : 174-175.
- Kondo, K., Y. Hayakawa and H. Mori.** 1990. Detection by polymerase chain reaction amplification of HHV6 DNA in peripheral blood of patients with exanthem subitum. J. Clin. Microbiol. 28 : 970-974.
- Kondo, K., T. Kondo, T. Okuno, M. Takahashi and K. Yamanishi.** 1991. Latent human herpesvirus 6 infection of human monocytes/macrophages. J. Gen. Virol. 72 : 1401-1408.
- Krueger, G.R., C. Sander, A. Hoffman, A. Barth, B. Koch and M. Braun.** 1991. Isolation of human herpesvirus 6 from patients with collagen vascular diseases. *In Vivo* 5 : 217-226.
- Krueger, G.R.F., K. Wasserman, L.S. De Clerck, W.J. Stevens, N. Bourgeois, D.V. Ablashi, S.F. Josephs and N. Balachandran.** 1990. Latent herpesvirus 6 in salivary and bronchial glands. Lancet 36 : 1255-1256.
- Kusuhara, K., K. Ueda, C. Miyazaki, K. Okada and K. Tokugawa.** 1992. Attack rate of exanthem subitum in Japan. Lancet 340 : 482.

- Kusuhara, K., A. Takayabashi, K. Ueda, Y. Hidaka, I. Minamishima, H. Take, K. Fujioka, S. Imai and T. Osato.** 1997. Breast Milk is not a significant source for early EBV or HHV6 infection in infants: a seroepidemiologic study in 2 endemic areas of human T-cell lymphotropic virus type I in Japan. *Microbiol. Immunol.* 41: 309-312.
- Kyte, J. and R.F. Doolittle.** 1982. A simple method for displaying the hydropathic character of a protein. *J. Mol. Biol.* 157 : 105-132.
- Lam, K.S., S.E. Salmon, E.M. Hersh, V.J. Hruby, W.M. Kazmierski, R.J. Knapp.** 1991. A new type of synthetic peptide library for identifying ligand-binding activity. *Nature* 354 : 82-84
- Lando, G., J.A. Berzofsky and M. Reichlin.** 1982. Antigenic structure of sperm whale myoglobin : I: Partition of specificities between antibodies reactive with peptide and native protein. *J. Immunol.* 129 : 206-211.
- Lautenschlager, I., K. Hockerstedt, K. Linnavuori and E. Taskinen.** 1998. Human herpesvirus 6 infection after liver transplantation. *Clin. Infect. Dis.* 26 : 702-707.
- Leach, C.T., C.V. Sumaya, N.A. Brown.** 1994. Human herpesvirus 6: clinical implications of a recently discovered, ubiquitous agent. *J. Pediatr.* 121: 173-181.
- Levine, P.H., J. Neequaye, M.S. Yadav and R. Connelly.** 1992. Geographic ethnic differences in human herpesvirus 6 antibody patterns. *Microbiol. Immunol.* 36 : 169-172.
- Levy, J.A., F. Ferro, D. Greenspan and E.T. Lennette.** 1990. Frequent isolation of HHV6 from saliva and high seroprevalence of the virus in the population. *Lancet* I : 1047-1050.
- Levy, J.A.** 1997. Three new human herpesviruses (HHV6, 7 and 8). *Lancet* 349 : 558-563.
- Lindquister, G.J., J.J. O'Brian, E.D. Anton, C.A. Greenamoyer, P.E. Pellett and T.R. Dambaugh.** 1997. Genetic content of a 20.9 kb segment of human herpesvirus 6B strain Z29 spanning the homologs of human herpesvirus 6A genes U40-57 and containing the origin of DNA replication. *Arch. Virol.* 142 : 103-123.
- Littler, E., G. Lawrence, M-Y. Liu, B.G. Barrell and J.R. Arrand.** 1990. Identification, cloning and expression of the major capsid protein gene of human herpesvirus 6. *J. Virol.* 64 : 714-722.
- Lopez, C., P. Pellet, J. Stewart, C. Goldsmith, K. Sanderlin, W.D. Black and P. Feorino.** 1988. Characteristics of HHV6. *J. Infect. Dis.* 157 : 1271-1273

- Luppi, M., R. Marasca, P. Barozzi, T. Artusi and G. Torelli.** 1994. Frequent detection of human herpesvirus 6 sequences by polymerase chain reaction in paraffin embedded lymph nodes from patients with angioblastic lymphadenopathy and angioblastic lymphadenopathy like lymphoma. *Leuk. Res.* 103 : 1003-1011.
- Lusso, P. and R.C. Gallo.** 1995. Human herpesvirus 6 in AIDS. *Immunol. Today* 16 : 67-71.
- Lusso, P.** 1996. Human herpesvirus 6. *Antiviral Res.* 31: 1-21.
- Lusso, P., P.D. Markham, E. Tschachler, F. DiMarzo Veronese, S.Z. Salahuddin, D.V. Ablashi, S. Pahwa and R.C. Gallo.** 1988. *In vitro* cellular tropism of human B lymphotropic virus (HHV6) *J. Exp. Med.* 167 : 1659-1670.
- Lusso, P., P.D. Markham, S.E. DeRocco and R.C. Gallo.** 1990. *In vitro* susceptibility of T-lymphocytes from chimpanzees (*Pan troglodytes*) to human herpesvirus 6 (HHV6): a potential animal model to study the interaction between HHV6 and HIV-1 *in vivo*. *J. Virol.* 64 : 2751-2758.
- Lusso, P., M. Malnati, A. De Maria, C. Balotta, S.E. DeRocco, P.D. Markham and R.C. Gallo.** 1991a. Productive infection of CD4+ and CD8+ mature human T cell populations and clones by human herpesvirus 6. Transcriptional down-regulation of CD3. *J. Immunol.* 147 : 685-691.
- Lusso, P., A. De Maria, M. Malnati, F. Lori, S.E. DeRocco, M. Baseler and R.C. Gallo.** 1991b. Induction of CD4 and susceptibility to HIV-1 infection in human CD8+ T lymphocytes by human herpesvirus 6. *Nature* 349 : 533-535.
- Lusso, P., M.S. Malnati, A. Garzino-Demo, R.W. Crowley, E.O. Long and R.C. Gallo.** 1993. Infection of natural killer cells by human herpesvirus 6. *Nature* 362 : 458-462.
- Lusso, P., P. Secchiero and R.W. Crowley.** 1994. *In vitro* susceptibility of *Macaca nemestrina* to HHV6 : a potential animal model of coinfection with primate immunodeficiency viruses. *AIDS Res. Hum. Retroviruses* 10 : 181-187.
- Mador, N., D. Goldenberg, O. Cohen, A. Panet and I. Steiner.** 1998. Herpes simplex virus type 1 latency-associated transcripts suppress viral replication and reduce immediate early gene mRNA levels in a neuronal cell line. *J. Virol.* 72 : 5067-5075.
- Marodi, C.L., A. Csiszar, B. Sierra-Vazquez, D. Di Luca, K. Barabas, K. Nagy and J. Ongradi.** 1998. Studies on the antibodies to Human herpesvirus Type 6 among Hungarian patients with asymptomatic HIV infection. *Pathol. Onco. Res.* 4 : 56-61.
- Maksyutov, A.Z. and E.S. 'Zagrebelnaya.** 1993. ADEPT : a computer program for prediction of protein antigenic determinants. *Comput. Appli. Biosci.* 9 : 291-297

- Marsh, S., M. Kaplan, Y. Asano, D. Hoekzema, A.L. Kamaroff, J.E. Whitman and Ablashi.** 1996. Development and application of HHV6 antigen capture assay for the detection of HHV6 infections. *J. Virol. Methods* 61 : 103-112.
- Martin, C., M. Enborn, M. Soderstrom, S. Fredrikson, H. Dahl, J. Lycke, T. Bergstrom and A. Linde.** 1997. Absence of seven human herpesviruses, including HHV6, by polymerase chain reaction in CSF and blood from patients with multiple sclerosis and optic neuritis. *Acta Neurol. Scand.* 95 : 280-283.
- Maron, E., C. Shiozawa., R. Arnon and M. Sela.** 1971. Chemical and immunological characterization of a unique antigenic region in lysozyme. *Biochemistry.* 10 : 763-771
- Mayne, M., J. Krishnan, I. Metz, A. Nath, A. Auty, B.M. Sahai and C. Power.** 1998. Infrequent detection of HHV6 DNA in peripheral blood mononuclear cells from multiple sclerosis patients. *Ann. Neurol.* 44 : 391-394.
- Merelli, E., R. Bedin, P. Sola, P. Barozzi, G.L. Mancardi and G. Franchini.** 1997. HHV6 and HHV8 DNA sequences in brains of multiple sclerosis patients, normal adults and children. *J. Neurol.* 244 : 450-454.
- Minashima, I., K. Ueda, Y. Minematsu, Y. Minamishima, M. Umemoto, H. Take and K. Kuraya.** 1994. Role of breast milk in acquisition of cytomegalovirus infection. *Microbiol. Immunol.* 38 : 549-552.
- Milich, D.R.** 1989. Synthetic T and B cell recognition sites:Implications for vaccine development. *Adv. Immunol.* 45 : 195-281.
- Middledorp, J.M. and R.H. Melen.** 1988. Epitope mapping on the EBV major capsid protein using systematic synthesis of overlapping oligopeptides. *J. Virol. Methods* 21 : 147.
- Mirandola, P., P. Menegazzi, S. Mereghi, T. Ravaioli, E. Cassai and D. Di Luca.** 1998. Temporal mapping of transcripts in herpesvirus 6 variants. *J. Virol.* 72 : 3837-3844.
- Melen , R.H., W.C. Puijk., J.P.M. Langevald., J.P.M. Langedijk., A.V. Amerongen and W.M.M. Schaaper.** 1991. In *Immunological Recognition of Peptides in Medicine and Biology* (eds) Netty. D. Zegers, Wim J.A. Boersman and Eric Claassen
- Morris, D., E. Littler, D. Jordon and J.R. Arrand.** 1988. Antibody response to HHV6 and other herpesviruses. *Lancet* 2 : 1425-1426.
- Mukai, T., T. Yamamoto, T. Kondo, K. Kondo, T. Okuno, H. Kosuge and K. Yamanishi.** 1994. Molecular epidemiological studies of HHV6 in families. *J. Med. Virol.* 42 : 224-227.

- Naidu, B.R.** 1997. Molecular and immunological studies on *Chlamydia pneumoniae*. Ph.D. Dissertation.
- Neipel, F., K. Ellinger and B. Fleckenstein.** 1991. The unique region of the human herpesvirus 6 genome is essentially colinear with the UL segment of human cytomegalovirus. *J. Gen. Virol.* 72 : 2293-2297.
- Neipel, F., K. Ellinger and B. Fleckenstein.** 1992. Gene for the major antigenic structural protein (p100) of human herpesvirus 6. *J. Virol.* 66 : 3918-3924.
- Niederman, J.C., C.R. Liu, M.H. Kaplan and N.A. Brown.** 1988. Clinical and serological features of human herpesvirus 6 infection in three adults. *Lancet* 2 : 817-819.
- Nii, S., M. Yoshida, F. Uno, T. Kurata, K. Ikuta and K. Yamanishi.** 1990. Replication of HHV6 : morphological aspects. *In* Lopez, C., *et al* (eds), Immunobiology and prophylaxis of human herpes virus infections. Plenum Press, New York.
- Novotny J., M. Handschumacher and E. Haber.** 1986. Antigenic determinants in proteins coincide with surface regions accessible to large probes (antibody domains). *Proc. Natl. Acad. Sci. USA.* 83 : 226-230
- Okada, K., K. Ueda, K. Kusuhara, C. Miyazaki, K. Tokugawa, M. Hirose and K. Yamanishi.** 1993. Exanthema subitum and HHV6 infection : clinical observations in 57 cases. *Pediatr. Infect. J.* 12 : 204-208.
- Okuno, T., K. Takahashi, K. Balachandra, K. Shiraki, K. Yamanishi, M. Takahashi and K. Baba.** 1989. Seroepidemiology of human herpesvirus 6 infection in normal children and adults. *J. Clin. Microbiol.* 27 : 651-653.
- Okuno, T., K. Higashi, K. Shiraki, K. Yamanishi, M. Takahashi, Y. Kokado, M. Ishibashi, S. Takahara, T. Sonoda, K. Tanaka, K. Baba, H. Yabuuchi and T. Kurata.** 1990. Human herpesvirus 6 infection in renal transplantation. *Transplantation* 49 : 519-522.
- Okuno, T., T. Mukai, K. Baba, Y. Ohsumi, M. Takahashi and K. Yamanishi.** 1991. Outbreak of exanthem subitum in an orphanage. *J. Pediatr.* 119 : 759-761.
- Osiowy, C., I. Prud'Homme, M. Monette and S. Zou.** 1998. Detection of HHV6 DNA in serum by a microplate PCR-hybridization assay. *J. Clin. Microbiol.* 36 : 68-72.
- Parham, P.** 1984. Changes in conformation with loss of alloantigenic determinants of a histocompatibility antigen (HLA-B7) induced by monoclonal antibodies. *J. Immunol.* 132 : 2975-2983.

- Parker, J.M.R., D. Guo and R.S. Hodges.** 1986. New hydrophilicity scale derived from HPLC peptide retention data: Correlation of predicted surface residues with antigenicity and X-ray derived accessible sites. *Biochemistry* 25 : 5425-5432.
- Paterson, Y.** 1985. Delineation and conformational analysis of two synthetic peptide models of antigenic sites on rodent cytochrome c. *Biochemistry* 24 : 1048-1055.
- Pellett, P.E. and J.B. Black.** 1996. Human herpesvirus 6. *In* : Fields Virology (3rd edn) (Fields, B.N., Knipe D.M. and Howley, P.M., (eds) pp. 2587-2608, Lippincott-Raven.
- Pellett, P.E., G.J. Lindquester, P. Feorino and C. Lopez.** 1990. Genomic heterogeneity of HHV6 isolates. *In* : Lopez, C., Mori, R., Poizman, B., Whitley, R.W. (eds) Immunobiology and Prophylaxis in HHV6 infection. *Adv. Exp. Med. Biol.* 278 : 9-18.
- Pellett, P.E., D. Sanchez-Martinez, G. Dominguez, J.B. Black, E. Anton, C. Greenamoyer and T.R. Dambough.** 1993. A strongly immunoreactive virion protein of human herpesvirus 6 variant B strain Z29: identification and characterization of the gene and mapping of a variant-specific monoclonal antibody reactive epitope. *Virology* 195 : 521-531.
- Pietroboni, G.R., G.B. Harnett, M.R. Bucens and R.W. Honess.** 1988. Isolation of human herpesvirus 6 in saliva. *Lancet* 1 : 1059.
- Pietroboni, G.R., G.B. Harnett and M.R. Bucens.** 1989. Centrifugal enhancement of HIV and HHV6 infection *in vitro*. *J. Virol. Meth.* 24 : 85-90.
- Portolani, M., C. Cermelli, A. Moroni, M.F. Bertolani, D. DiLuca, E. Cassai and A.M. Sabbatini .** 1993. HHV6 infections in infants admitted to hospital. *J. Med. Virol.* 39 : 146-151.
- Pruksananonda, P., C.B. Hall, R.A. Insel, K. McIntyre, P.E. Pellett, C.E. Long, K.C. Schnabel, P.H. Pincus, F.R. Stamey, T.R. Dambaugh and J.A. Stewart.** 1992. Primary human herpesvirus 6 infection in young children. *N. Engl. J. Med.* 326 : 1445-1450.
- Qiu, X., J.S. Culp, A.G. DiLella, B. Hellmig, S.S. Hoog, C.A. Janson, S.S. Smith and S.S. Abdel-Meguid.** 1996. Unique fold and active site in cytomegalovirus protease. *Nature* 383 : 275-279.
- Randhawa, P.S., F.J. Jenkins, M.A. Nalesnik, J. Martens, P.A. Williams, A. Ries, S. Pham and A.J. Demitris.** 1997. Herpesvirus 6 variant A infection after heart transplantation with giant cell transformation in bile ductular and gastroduodenal epithelium. *Am. J. Surg. Pathol.* 21 : 847-853.

- Robert, C., H. Agut, J.T. Aubin, H. Collandre, D. Ingrand, A. Devillechabrolle, P. LeHoang and J.M. Huraux.** 1990. Detection of antibodies to HHV6 using immunofluorescence assay. *Res. Virol.* 141 : 545-555.
- Rotola, A., T. Ravaioli, A. Gonelli, S. Dewhurst, E. Cassai and D. DiLuca.** 1998. U94 of HHV6 is expressed in latently infected peripheral blood mononuclear cells and blocks viral gene expression in transformed lymphocytes in culture. *Proc. Natl. Acad. Sci. USA* 95 : 13911-13916.
- Roizman, B., R.S. Desrosiers, B. Fleckenstein, C. Lopez, A.C. Minson and M.J. Studdert.** 1990. The family Herpesviridae : An update. *Arch. Virol.* 123 : 425-449.
- Rudin, C. and H. Hirsch, H.** 1991. [How often can clinical diagnosis of exanthem subitum be confirmed with the HHV6 serology test]. *Klin. Padiatr.* 203 : 109-112.
- Rumbo, M., F.G. Chirido., M.C. Anon and C.A. Fossati.** 1998. Detection and characterization of antibodies specific to food antigens in human serum, saliva, colostrum and milk. *Clin. Expt. Immunol.* 112 : 453-458
- Sachs, D.H., A.N. Schechter, A. Eastlake and C.B. Anfinsen.** 1972. An immunological approach to the conformational equilibria of polypeptides. *Proc. Natl. Acad. Sci. USA* 69 : 3790-3794.
- Salahuddin, S.Z., D.V. Ablashi, P.D. Markham, S.F. Josephs, S. Sturzenegger, M.Kaplan, G. Halligan, P. Biberfeld, F. Wong-Staal, B. Kramarsky and R.C. Gallo.** 1986. Isolation of a new virus, HBLV, in patients with lymphoproliferative disorders. *Science* 234 : 596-601.
- Saxinger, C., H. Poleski, H. Eloy, S. Grufferman, R. Murphy, G. Tegtmeir, V. Parekh, S. Memon and C. Hung.** 1988. Antibody reactivity with HBLV (HHV6) in US populations. *J. Virol. Methods* 21 : 199-208.
- Schirmer, E.C., L.S. Wyatt, K. Yamanishi, W.J. Rodriguez and N. Frenkel.** 1991. Differentiation between two distinct classes of viruses now classified as human herpes virus 6. *Proc. Natl. Acad. Sci. USA* 88 : 5922.
- Schiewe, U., F. Neipel, D. Schreiner and B. Fleckenstein.** 1994. structure and transcription of an immediate early region of the human herpes virus 6 genome. *J. Virol.* 68 : 2978-2985.
- Secchiero, P., D.R. Carrigan, Y. Asano, L. Benedetti, R.W. Crowley, A.L. Komaroff, R.C. Gallo, and P. Lusso, P.** 1995. Detection of HHV6 plasma in children with primary infection and immunosuppressed patients by polymerase chain reaction. *J. Infect. Dis.* 171 : 273-280.
- Sela, M.** 1969. Antigenicity : some molecular aspects. *Science* 166 : 1365-1374.

- Shanavas, K.R., V. Kala, D.M. Vasudevan, T. Vijayakumar and M. Yadav.** 1992. Anti-HHV6 antibodies in normal population in cancer patients in India. *J. Expt. Pathology.* 6 : 6-12
- Shiraki, K., T. Okuno, K. Yamanishi and M. Takahashi.** 1989. Virion and nonstructural polypeptides of human herpesvirus 6. *Virus Res.* 13 : 173-178.
- Singer, S.J.** 1965. *In* Neurath, II (ed.), *The Proteins*, Vol. III, 2nd., Academic Press, New York. Pp.269.
- Sloots, T.P., J.P. Kapeleris, I.M. Mackay, M. Batham and P.L. Devine.** 1996. Evaluation of a commercial ELISA for detection of serum IgG response to HHV6. *J. Clin. Microbiol.* 34 : 675-679.
- Steeper, T.A., H.A. Horwitz, D.V. Ablashi, S.Z. Salahuddin, C. Saxinger, R. Saltzman and B. Schwartz.** 1990. The spectrum of clinical and laboratory findings resulting from human herpes virus 6 (HHV6) in patients with mononucleosis-like illnesses not resulting from EBV or cytomegalovirus. *Am.J. Clin. Path.* 93 : 776-783.
- Suga, S., T. Yoshikawa, Y. Asano, Y.Yazaki and S. Yoshida.** 1990. Simultaneous infection with HHV6 and measles cirus in infants. *J. Med. Virol.* 31 : 306-311
- Suga, S., T. Yoshikawa, Y. Asano, Y. Nakashima, T.Yazaki, M. Fukuda, S. Kojima, T. Matsuyama and Y. Ono.** 1992. IgM neutralising antibody response to human herpes virus 6 in patients with exanthem subitum or organ transplantation. *Microbiol. Immunol.* 36 : 495-506.
- Tainer, J.A., E.D. Getzoff, H. Alexander., R.A. Houghten., A.J. Olson., R.A. Lerner and W.A. Hendrickson.** 1984. The reactivity of antipeptide antibodies is the function of atomic mobility of sites in a protein. *Nature* 312 : 127-133
- Tajiri, H., K. Tanaka-Taya, Y.Ozaki, S. Okada, S. Mushiake and K. Yamanishi.** 1997. Chronic hepatitis in an infant, in association with HHV6 infection. *J. Pediatr.* 131 : 473-475
- Takahashi, K., S. Sonada, K. Kawakami, K. Miyata, T.Oki, T. Nagata, T.Okuno and K. Yamanishi.** 1988. Human herpesvirus 6 and exanthem subitum. *Lancet* I : 1463
- Takahashi, K., S. Sonada, K. Higashi, T. Kondo, H. Takahashi, M. Takahashi, S.Takahashi and K. Yamanishi.** 1989. Predominant CD4 T-lymphocyte tropism of human hrepesvirus 6-related virus. *J. Virol.* 63 : 3161-3163.
- Tang, Y.W., M.J. Espy, D.H. Persing and T.F. Smith.** 1997. Molecular evidence and clinical significance of herpesvirus coinfection in central nervous system. *J. Clin. Microbiol.* 35 : 2869-2872

- Teo, I.A., B.E. Griffin and M.D. Jones.** 1991. Characterization of the polymerase DNA gene of human herpesvirus 6. *J. Virol.* 65 : 4670-4680
- Thomson, B.J., S. Dewhurst and D. Gray.** 1994. Structure and heterogeneity of the sequences of human herpes virus 6 strain variants U1102 and z29 and identification of human telomeric sequences at the genomic termini. *J. Virol.* 68 : 3007-3014.
- Thornton, J.M. M.S. Edwards., R.R. Taylor. and D.J. Barlow.** 1986. Location of continuous antigenic determinants in protruding regions of proteins. *EMBO* 5 : 409-413
- Torelli, G., R. Marasca, M. Montorsi, M. Luppi, P.Barozzi, L. Ceccherini, G. Batoni, M. Bendinelli and A. Muyombano.** 1992. HHV6 in non-AIDS related Hodgkins and non-Hodgkins lymphomas. *Leukemia* 6 Suppl. 3 : 46S-48S
- Ueda, K., K. Kusuhara, M. Hirose, K.Okada, C. Miyazaki, K. Takugawa, M.Nakayama amd K. Yamanishi.** 1989. Exanthema subitum and antibody to human herpes virus 6. *J. Infect. Dis.* 159 : 750-752
- Umamaheswari, S.** 1993. Antibody reactivity to two human lymphotropic herpesviruses in some diseases. M. Phil. Thesis. University of Malaya.
- Vasudevan, D.M. and Y. Vijayakumar.** 1998. Viruses in human oral cancers. *J. Exp. Clin. Cancer Res.* 17 : 27-31
- Wagner, M., J.M. Berghaus, R. Schroeder, S. Sollberg, J. Luka, N. Leyssens, B.Schneider and G.R.F. Krueger.** 1997. HHV6-associated necrotizing encephalitis in Griscelli's Syndrome. *J. Med. Virol.* 53 : 306-312
- Wallace, H.L., B. Natelson, W. Gause and J. Hay.** 1999. HHV6 in chronic fatigue syndrome. *Clin. Diagn. Lab. Immunol.* 6 : 216-223
- Walter, G.** 1986. Production and use of antibodies against synthetic peptides. *J. Immunol. Methods* 88 : 149-161
- Ward, K.N., J.J. Gray, M.W. Fotheringham and M.J. Sheldon.** 1993. IgG Antibodies to HHV6 in young children: Changes in avidity of antibody correlate with time after infection. *J. Med. Virol.* 39 : 131-138
- Ward, K.N., J.J. Gray and S. Efstathiou.** 1989. Brief report: primary HHV6 infection in a patient following liver transplantation from a seropositive donor. *J. Med. Virol.* 28 : 69-72
- Westhoff, E., D. Altschuh., D. Moras., A.C. Bloomer, A. Mondragon, A. Klug and M.H.V. van Regenmortel.** 1984. Correlation between segmental mobility and the location of antigenic determinants in proteins. *Nature* 311 : 123-126

- Wyatt, L.S. and N. Frenkel.** 1992. HHV7 is a constitutive inhabitant of adult human saliva. *J. Virol.* 66 : 3206-3209
- Yadav, M., S. Umamaheswari and D.V. Ablashi.** 1990. Low prevalence of antibody to HHV6 in Kadazans. *Southeast Asian J. Trop. Med. Pub. Health* 21 : 259-263
- Yadav, M., S. Umamaheswari and D.V. Ablashi.** 1991. antibody reactive with two strains of HHV6 in Malaysians. *J. Med. Virol.* 33 : 236-239
- Yamanishi, K., T. Okuno, K. Shiraki, M. Takahashi, T. Kondo, Y. Asano and T. Kurata.** 1988. Identification of human herpesvirus 6 as a casual agent for exanthem subitum. *Lancet* I : 1065-1067
- Yamamoto, M., J.B. Black, J.A. Stewart, C. Lopez and P.E. Pellett.** 1990. Identification of a neucocapsid protein as a specific serological marker of HHV6 infection. *J. Clin. Microbiol.* 28 : 1957-1962.
- Yanagi, K., S. Harada, F. Ban, A. Oya, N. Okabe and K. Tobina.** 1990. High prevalence of antibody to HHV6 and decrease in titer with increase in age in Japan. *J. Infect. Dis.* 161 : 153-154
- Yasukawa, M., Y. Inoue, H. Ohminami, K. Terada and S. Fujita.** 1998. Apoptosis of CD4+ T lymphocytes in HHV6 infection. *J. Gen. Virol.* 79 : 143-147
- Yoshida, M., F. Uno, Z.L. Bai, M. Yamada, S.Nii, T. Sata, T. Kurata, K. Yamanishi and M. Takahashi.** 1989. Electron microscopic study of herpes-type virus isolated from an infant with exanthem subitum. *Microbiol. Immunol.* 33 : 147-154
- Yoshikawa, T., T. Nakashima, S. Suga, Y. Asano, T. Yazaki and H. Kimura.** 1992a. HHV6 DNA in cerebrospinal fluid of a child with exanthem subitum and meningoencephalitis. *Pediatrics* 89 : 888-890
- Yoshikawa, T., T. Nakashima, Y. Asano, T. Yazaki and H. Kimura.** 1992b. Endonuclease analyses of DNA of HHV6 isolated from blood before and after bone marrow transplantation. *J. Med. Virol.* 37 : 228-231
- Yoshikawa, T., M. Ihara, H. Furukawa, S. Suga, K. Asonuma, K. Tanaka and Y. Asano.** 1998. Four cases of HHV6 variant B after pediatric liver transplantation. *Transplantation* 65 : 1266-1269
- Yoshikawa, T., S. Suga, Y. Asano, T. Yazaki and T.Ozaki.** 1990. Neutralizing antibodies to human herpes virus 6 in healthy individuals. *Pediatr. Infect. Dis. J.* 9 : 589-590

Yoshiyama, H., E. Suzuki, T. Yoshida, T. Kajii and N. Yamamoto. 1990. Role of human herpesvirus 6 infection in infants with with exanthem subitum. *Pediatr. Infect. Dis. J.* 9 : 71-74