



Conferences News About Us Job: Home Journals Books Home > Journal > Medicine & Healthcare > WJA WJA Subscription Indexing View Papers Aims & Scope Editorial Board Guideline Article Processing Charges Most popular papers in WJA WJA> Vol.2 No.4, December 2012 About WJA News OPEN ACCESS Frequently Asked Questions Cidofovir Therapy for Adenovirus Pneumonia in an AIDS Patient on HAART: A Case Report Recommend to Peers PDF (Size: 158KB) PP. 347-350 DOI: 10.4236/wja.2012.24046 Recommend to Library Trong Tony Trinh, Quy Ton, Robert Y. Choi Contact Us **ABSTRACT** Introduction: Adenovirus infections are associated with significant morbidity and mortality among Downloads: 27,769 immunocompromised hosts. Adenovirus pneumonia is a rare and often fatal disease in patients with AIDS. Case Report: We report a case of a 28-year-old woman with advanced HIV/AIDS, who developed Visits: 81,162 pneumonia four weeks after initiation of highly active antiretroviral therapy (HAART). Despite empiric antibiotics, the patient developed worsening hypoxemia and progressive pneumonia on chest x-ray. Culture data from a bronchoalveolar lavage (BAL) was negative for bacteria, fungi, pneumocystis jirovecii, but was Sponsors >> positive for adenovirus detected by PCR. After transfer to a tertiary care hospital intensive care unit, a

KEYWORDS

Adenovirus Pneumonia; AIDS; HIV; Cidofovir

Cite this paper

T. Tony Trinh, Q. Ton and R. Y. Choi, "Cidofovir Therapy for Adenovirus Pneumonia in an AIDS Patient on HAART: A Case Report," *World Journal of AIDS*, Vol. 2 No. 4, 2012, pp. 347-350. doi: 10.4236/wja.2012.24046.

adenovirus pneumonia among HIV patients, especially those established on HAART.

repeat BAL confirmed the presence of adenovirus by immunohistochemical staining. Tissue samples sent for histopathology revealed "smudge cells". Serum adenovirus viral load was 1.6×10^5 copies/mL. Intravenous cidofovir, 1 mg/kg/day, was initiated and scheduled three times a week. The patient exhibited remarkable improvement and was discharged to home in stable condition after four doses of cidofovir treatment. Discussion: Prior to our case, the few published accounts of HIV patients with adenovirus pneumonia treated with cidofovir have all resulted in death. Our case is distinct from these cases by the lack of concomitant pulmonary infection and the initiation of HAART prior to presentation. Conclusion: To our knowledge, we present the first case of adenovirus pneumonia in a patient with AIDS successfully treated with cidofovir. Our case suggests that limited and low dose cidofovir may be an efficacious approach to treat

References

- [1] O. A. Adeyemi, A. V. Yeldandi and M. G. Ison, "Fatal Adenovirus Pneumonia in a Person with AIDS and Burkitt Lymphoma: A Case Report and Review of the Literature," AIDS Reader, Vol. 18, 2008, pp. 196-198, 201-202, 206-207.
- [2] S. H. Khoo, A. S. Bailey, J. C. de Jong and B. K. Mandal, "Adenovirus Infections in Human Immunodeficiency Virus-Positive Patients: Clinical Features and Molecular Epidemiology," Journal of Infectious Diseases, Vol. 172, No. 3, 1995, pp. 629-637. doi:10.1093/infdis/172.3.629
- [3] M. Echavarria, " Adenoviruses in Immunocompromised Hosts," Clinical Microbiology Reviews, Vol. 21, No. 4, 2008, pp. 704-715. doi:10.1128/CMR.00052-07
- [4] H. Vinti, A. Pesce, B. Reboulot, E. Rosental, J. F. Michiels and J. P. Cassuto, "Fatal Adenovirus Pneumonia in an HIV-1 Infected Patient," IX International Conference on AIDS, 6-11 June 1993.
- [5] J. Koopmann, F. Dombrowski, J. K. Rockstroh, U. Pfeifer, T. Sauerbruch and U. Spengler, "Fatal Pneumonia in an AIDS Patient Coinfected with Adenovirus and Pneumocystis Carinii," Infection, Vol. 28, No. 5, 2000, pp. 323-325. doi:10.1007/s150100070028

- [6] G. Nebbia, A. Chawla, M. Schutten, C. Atkinson, M. Raza, M. Johnson and A. M. Geretti, "Adenovirus Viraemia and Dissemination Unresponsive to Antiviral Therapy in Advanced HIV-1 Infection," AIDS, Vol. 19, No. 12, 2005, pp. 1339-1340. doi:10.1097/01.aids.0000180115.26561.27
- [7] A. M. La Rosa, R. E. Champlin, N. Mirza, J. Gajewski, S. Giralt, K. V. Rolston, I. Raad, K. Jacobson, D. Kontoyiannis, L. Elting and E. Whimbey, "Adenovirus Infections in Adult Recipients of Blood and Marrow Transplants," Clinical Infectious Diseases, Vol. 32, No. 6, 2001, pp. 871-876. doi:10.1086/319352
- [8] F. Morfin, S. Dupuis-Girod, S. Mundweiler, D. Falcon, D. Carrington, P. Sedlacek, M. Bierings, P. Cetkovsky, A. Kroes, M. Van Tol and D. Thouvenot, "In Vitro Susceptibility of Adenovirus to Antiviral Drugs Is Species-Dependent," Antiviral Therapy, Vol. 10, 2005, pp. 225-229.
- [9] P. Ljungman, P. Ribaud, M. Eyrich, S. Matthes-Martin, H. Einsele, M. Bleakley, M. Machaczka, M. Bierings, A. Bosi, N. Gratecos and C. Cordonnier, "Cidofovir for Adenovirus Infections after Allogeneic Hematopoietic Stem Cell Transplantation: A Survey by the Infectious Diseases Working Party of the European Group for Blood and Marrow Transplantation," Bone Marrow Transplant, Vol. 31, 2003, pp. 481-486. doi:10.1038/sj.bmt.1703798
- [10] P. Ljungman, "Treatment of Adenovirus Infections in the Immunocompromised Host," European Journal of Clinical Microbiology & Infectious Diseases, Vol. 23, No. 8, 2004, pp. 583-588. doi:10.1007/s10096-004-1165-x
- [11] C. A. Lindemans, A. M. Leen and J. J. Boelens, " How I Treat Adenovirus in Hematopoietic Stem Cell Transplant Recipients," Blood, Vol. 116, No. 25, 2010, pp. 5476-5485. doi:10.1182/blood-2010-04-259291