

Treatment of postoperative infectious complications in HIV infected patients

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Objective: To analyze the risk factors affecting postoperative infectious complications in HIV-infected patients and explore the rational use of perioperative antibiotics.

Methods: Retrospective analysis of 308 HIV-infected patients (male 272, female 36) who were operated at the Shanghai Public Health Clinical Center from Nov 2008 to Apr 2012. The patients were divided into postoperative infection and non-infection groups. Age and clinical variables were compared. The correlation between the method of surgical incision, surgical site infection (SSI) and postoperative sepsis were analyzed. Prophylactic antibiotics were used for patients with type I and II surgical incisions for no longer than 2 days. Patients with type III surgical incisions were administered antibiotics until infection was controlled. Antiretroviral therapy (ART) were used before operation for patients whose preoperative CD4 counts were <350 cells/ μ L. For those patients whose preoperative CD4 counts were <200 cells/ μ L, Sulfamethoxazole and fluconazole were administered preoperatively as a prophylaxis against *Pneumocystis carinii pneumonia* and fungal infection.

Results: 196 patients developed postoperative infectious complications with 7 mortalities. Preoperative CD4 counts, ratio of CD4/CD8 cells, hemoglobin level, and postoperative CD4 counts, hemoglobin and albumin levels were risk factors of perioperative infection in HIV-infected patients. Patients with a preoperative CD4 count < 200cell/ μ L, anemia, or a postoperative CD4 count < 200cell/ μ L and albumin levels < 35g/L correlated with a higher rate of postoperative infection. There was a significant correlation between SSI and the type of surgical incision. The rate of SSI in patients with type I surgical incision was 2% and the patients with type II surgical incision was 38%. All the patients who received type III surgical incisions developed SSI. Patients with SSI were more likely to develop postoperative sepsis.

Conclusions: HIV-infected patients are more likely to develop postoperative infectious complications. Rational use of antibiotics in HIV-infected patients could help to reduce the rate of postoperative infectious complications in these patients.

Biography

Baochi Liu received his Ph.D. from Zhengzhou University in 2007. He received his B.S. in 1983. He has many Peer-reviewed Publications in reputed journals. His research interest includes general surgery, surgery infection and trauma. He is currently working as a Director and Professor in Department of Surgery, Shanghai Public Health Clinical Center Affiliated to Fudan University, Shanghai, China.

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