Commentary

Editorial on transurethral prostatectomy in human immunodeficiency virus infected

Benign prostatic hyperplasia is a common condition in many sub-Saharan African countries. Up to 33% of men over 45 years have symptoms related to prostate enlargement.[1] The human immunodeficiency virus (HIV) prevalence in sub-Saharan Africa ranges from 15% to 35%.[2] With the advent of increased HAART the disease is being increasingly converted to a chronic disease and allowing for longer life spans. In some countries the HIV prevalence among inpatients is as high as 40%.[1,2] Occupational risk of HIV is high in Africa particularly during urology and other surgical procedure. The college of Surgeons of East Central and Southern Africa has provided some guidelines on occupational risk, among which is the recommendation to use endoscopic rather than open surgical techniques.[3,4] This paper discusses transurethral resection of the prostate with a CCTV camera, suction, and continuous irrigation to reduce this occupational risk. Though a single case study is provided by the authors nonetheless, the value of endoscopic prostate surgery in reduced occupational risk and postoperative outcome is well made.

Epidemiology Review

The prevalence of HIV in urology patients is high. The virus has a predilection for the genitourinary system. The highest levels of virus concentration are found in vaginal and seminal fluids. When the CD4 count falls below 200/m^3 the genitourinary system becomes increasingly vulnerable to infection. With the use of HAART the life expectancy of HIV-positive patients has been increased by 20 years. This means that though uncommon patients who have BPH may present with HIV infection. The occupational risk of acquiring HIV infection has been variously estimated at 0.1%-0.3%. A common presentation of HIV infection in low-CD4-count patients is prostatitis and prostatic abscess; this is common in up to 14% of patients.[5,6]

Clinical Review

It is estimated that between 20% and 25% of HIV-positive patients require surgery. Studies have shown that up to 40% of surgeons have operated on HIV-positive patients. The rate of percutaneous injury during surgery has been variously estimated at between 2.5% and 15%. In Africa the HIV prevalence of the population means surgeons practicing in Africa are at 15 times more increased risk of infection. Some workers have shown no difference in outcome among HIV- and non-HIV patients if the CD4 count is normal. However the outcome of the patient is considerably improved if the CD4 count is high, but minimal invasive techniques are used for surgical interventions. The risk of infection following mucous membrane exposure is estimated to be 0.09%.[5,6]

Conclusion

The high HIV prevalence in Africa and the increasing usage of HAART has converted HIV disease into a manageable chronic illness. This means that these patients live longer and are more likely to require surgery during their life span. This pauses a risk to the patient and to the surgeon. Benign prostatic hyperplasia is a common urological condition in men above 45 years often requiring urological intervention. This paper describes a case study of a minimal invasive technique that can be performed safely and reduce the occupational risk to the surgeons and improve surgical outcome for the patient.

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References

1. Bowa K, Labib M. A review of HIV disease in Urology. Med J Zambia 2003;5:77-9.
2. Lee LK, Dinneen MD, Ahmad S. The urologist and the patient infected with HIV virus or with AIDS. BJU Int 2001;88:500-10.
3. Staiman VR, Lowe FC. Urologic problems in patients with acquired immunodeficiency syndrome. Scientific World Journal 2004;4 Suppl 1:427-37.
4. Hoepelman AL, Van Buren M, Van den Broek J, Barleffs JC. Bacteriuria in men infected with HIV −1 is related to their immune status (CD 4 and cell count). AIDS 1992;6:179-84.
5. Lepart C, Rousseau F, Peronne C, Salman D, Jourg A, Vilde JL. Bacterial Prostatitis in patients infected with HIV. J Urol 1989;141:334-6.
6. Centre for Disease Control and Prevention. Case control study of HIV seroconversion in Health. Care workers after percutaneous exposure to HIV infected blood. France, United Kingdom and United States, January 1988-August 1994. MMWR Morb Mortal Wkly Rep 1995;44:929-33.