

Proceedings

Open Access

Surgical versus medical castration in the Bahamas: a male macho paradox

Robin Roberts

Address: Department of Surgery, Princess Margaret Hospital, The University of the West Indies School of Clinical Medicine and Research, (The Bahamas), Nassau, Bahamas

Email: Robin Roberts - robinnassau50@yahoo.com

from Second Annual International African-Caribbean Cancer Consortium Conference
Miami, FL, USA. 12–13 May 2008

Published: 10 February 2009

Infectious Agents and Cancer 2009, **4**(Suppl 1):S4 doi:10.1186/1750-9378-4-S1-S4

This article is available from: <http://www.infectagentscancer.com/content/4/S1/S4>

© 2009 Roberts; licensee BioMed Central Ltd.

This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Background

The high prevalence and incidence of prostate cancer is a global phenomenon [1,2]. In the pre-Prostate Specific Antigen (PSA) era, the clinical hallmarks of prostate cancer were late disease presentations and high mortality rates [3]. The documentation of even more advanced presentations and higher mortality rates in males of African ancestry is of great concern for countries like the Bahamas with significant populations of this ethnicity. [4-10]

Over the past 15 years, there has been a notable change in the clinical presentation of prostate cancer, with more organ confined disease [11,12]. Studies suggest that this documented and consistent trend in the developed countries [13-17], of early disease detection and down stage migration with associated decreasing mortalities, reflect the merits of aggressive PSA screening programs.

In the Bahamas, a country where 85% of the population are of African ancestry, prostate cancer represents both the highest incidences of male malignancy occurrences and cancer specific deaths. Unfortunately, despite the increased campaigns for early detection since the introduction of PSA testing, there has been no down stage migration of clinical presentations of this malignancy in the Bahamas, as has occurred in the developed countries [18]. The cultural ethos of the Caribbean male of African ancestry suggests that health preventative initiatives, inclusive of the digital rectal examination are counter to

our valued macho-male image. Men therefore do not avail themselves of the publically accessible early prostate cancer detection programs.

With this high incidence of advance disease and noting that hormonal therapy remains the first treatment of choice, we sought to determine the most common treatment modality employed in our institution with regards to surgical versus medical castration. Emphasizing the need for cost effective and affordable care in our developing country, would men of African ancestry in a macho dominated society opt to have surgical castration as the preferred treatment?

Methods

All men presenting with advanced prostate cancer at the government-owned public health facility, the Princess Margaret Hospital, are informed by the Consultant Urological Surgeon of the various medical and surgical hormonal options and their advantages and disadvantages. They are informed also that the institution would provide the surgical option of bilateral orchiectomies at no charge, but the cost of the medical treatment option must be borne by the patient.

At the only two hospitals on New Providence Island in the Bahamas, the Princess Margaret Hospital, (450 beds) and the privately-owned Doctors Hospital (70 beds), all pathology reports for biopsy proven cancers and the oper-

ative log for the number of surgical castration procedures were reviewed during a thirteen years period from 1987 to 2000. The data base is compiled from that of a solo urology service providing care in both the private and public sectors in the Bahamas; this service represents 70% of the urological health care delivered in the country. It is important to note that almost 70% of the population of the Bahamas resides on New Providence Island on which the capital city of the Bahamas is located.

Results

There were 535 pathology-diagnosed cases of prostate cancer identified. 275 bilateral orchiectomies were performed in patients presenting with advance prostate cancer during this period, an average of 21.5 bilateral orchiectomies performed annually.

For the five years period 2003 to 2007 at the government's public hospital, all cases of pathology proven prostate cancer were reviewed. There were 363 documented cases of prostate cancer. During this period, there were 103 cases of bilateral orchiectomies recorded in the operative log of the hospital, averaging 20.6 cases per year. The frequency of bilateral orchiectomies performed annually was similar to that of the thirteen year period.

This high rate of hormonal treatment is an indication of the continuing trends of advance disease as the initial presentation of males diagnosed with prostate cancer in the Bahamas. The trend of increasing annual mortality rates for prostate cancer has continued unabated for the past 15 years, contrary to that of the developed countries; this is well documented in the annual cancer mortality reports by the Health Information and Research Unit of the Ministry of Health and Social Services of the Bahamas.

Conclusion

This study concludes that men in the Bahamas with advanced prostate cancer would opt for surgical castration when presented 'positively' as the preferred treatment. These findings are contrary to the perception of the macho-male image of the Caribbean male and invite further studies into the complex psyche of our Bahamian males.

Competing interests

The author declares that they have no competing interests.

Acknowledgements

This article has been published as part of *Infectious Agents and Cancer*. Volume 4 Supplement 1, 2009: Second Annual International African-Caribbean Cancer Consortium Conference. The full contents of the supplement are available online at <http://www.infectagentscancer.com/supplements/4/S1>.

References

1. Parkin DM, Bray F, Ferlay J, et al.: **Global Cancer Statistics, 2002.** *CA Cancer J Clin* 2005, **55**:74-108.
2. American Cancer Society: **Cancer Facts and Figures 2006.** Atlanta, Ga: American Cancer Society; 2006.
3. Quinn M, Babb P: **Patterns and trends in Prostate cancer incidence, survival, prevalence and mortality. Part I; international Comparisons.** *BJU International* 2002, **90**:162-173.
4. Hsieh K, Albertsen PC: **Populations at high risk for Prostate cancer.** *Urol Clin North Am* 2003, **30**:669-676.
5. Glover FE, Coffey DS, Douglas LL, et al.: **The Epidemiology of Prostate Cancer in Jamaica.** *J Urol* 1998, **159**(6):1984-1986.
6. Bunker CH, Patrick AL, Kinety BR, et al.: **High Prevalence of Screening-detected Prostate cancer among Afro-Caribbeans: The Tobago Prostate Cancer Survey.** *Cancer Epidemiol Biomarkers Prev* 2002, **11**:726-729.
7. Brawn PN, Johnson EH, Kuhl DL, et al.: **Stage at Presentation and survival of white and black patients with prostate carcinoma.** *Cancer* 1993, **71**:2569-2573.
8. Hoffman RM, Gilliland FD, Eley JW, et al.: **Racial and ethnic differences in advanced-stage prostate cancer: The prostate cancer outcomes study.** *J Natl cancer Inst* 2001, **93**(5):388-95.
9. French DB, Jones LA: **Minority Issues in Prostate Disease.** *Med Clin N Am* 2005, **89**:805-816.
10. Dutta Roy S, Philip J, Javle P: **Trends in prostate cancer incidence and survival in various socioeconomic classes: A population-based study.** *Int J Urol* 2005, **12**(7):644-53.
11. Wilson SS, Crawford ED: **Screening for Prostate Cancer: Current Recommendations.** *Urol Clin North Am* 2003, **31**:219-226.
12. **Prostate Cancer Epidemiology** [http://www.cancerline.com/cancerlinehcp/9898_12031_6_1_1.aspx]
13. Cooperberg MR, Mou J, Carroll PR: **Changing Face of Prostate cancer.** *J Clin Oncol* 2005, **23**(32):8146-8151.
14. Jemal A, Murray T, Samuels A, et al.: **Cancer Statistics, 2003.** *CA Cancer J Clin* **53**:5-26.
15. Holmberg L, Bill-Alexson A, Helgesen F, et al.: **A Randomized trial comparing radical prostatectomy with watchful waiting in early prostate cancer.** *N Engl J Med* 2002, **347**:781-789.
16. Labrie F, Candas B, Cusan L, et al.: **Screening decreases prostate cancer mortality: 11 year follow-up of the 1988 Quebec prospective randomized controlled trial.** *Prostate* 2004, **59**:311-318.
17. Bartsch G, Horninger W, Knlocker H, et al.: **Prostate cancer mortality after introduction of prostate-specific antigen mass screening in the Federal republic of Tyrol, Austria.** *Urology* 2001, **58**:417-424.
18. Roberts R, Mathan B: **Real Men die from Prostate Cancer. "3rd Annual African American Prostate Cancer Disparity Summit." 2007 Washington DC.** .

Publish with **BioMed Central** and every scientist can read your work free of charge

"BioMed Central will be the most significant development for disseminating the results of biomedical research in our lifetime."

Sir Paul Nurse, Cancer Research UK

Your research papers will be:

- available free of charge to the entire biomedical community
- peer reviewed and published immediately upon acceptance
- cited in PubMed and archived on PubMed Central
- yours — you keep the copyright

Submit your manuscript here:
http://www.biomedcentral.com/info/publishing_adv.asp

