Incidence, stage and treatment for Prostate Cancer Patients within Sydney South West Area Health Service public facilities

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Background and Scope
The Sydney South West Area Health Service (SSWAHS) provides health services to an estimated population of 1.4 million residents. The SSWAHS Clinical Cancer Registry program is funded by the New South Wales Cancer Institute (CINSW) to collect detailed information and monitor trends in diagnosis, stage, treatment and quality of care, from public hospital source systems for patients diagnosed with cancer on or after 1 July 2007.

Specialty tumour groups are involved in analysis of this data for quality assurance and to improve source data.

The NSW Central Cancer Registry population data reported:
• In 2007, 36,613 people were diagnosed with invasive cancer in NSW
• Maltese were 1.5 times more likely to be diagnosed with cancer than females
• Prostate cancer is responsible for 33% of all new cancers for men
• Incidence rates for prostate cancer have increased sharply

Cancers of the prostate. In 2007, prostate cancer accounted for 977 (7%) deaths. The most common country of birth for prostate cancer patients was Australia (45%) and of those born overseas most were born in Europe (27%) or Asia (16%).

Demographics
The average age at diagnosis was 69 with the range 42 to 93 years.

SSWAHS Residents
Non-SSWAHS Residents
Intermediate/Overseas

Country of Birth
Australia 219 (43%)
Europe 120 (23%)
Rest of World 56 (11%)
Unknown 13 (2%)

Figure 1. Age distribution by risk for Surgery patients

Gleason Score
4 5 6 7 8 9 10

Figure 2: New cases of Cancer in Persons, NSW, 2007

Risk
Clinic T Stage
T1a T1b T1c T2a T2b T2c T3a T3b T3c

Figure 3. Treatment Groups by Residence, SSWAHS, 2007

High Risk
Definitive EBRT prescribed at 70-70Gy in 1.8-2Gy/fraction with concurrent Androgen Deprivation Therapy.

Intermediate risk
Definitive EBRT prescribed at 74-78Gy in 1.8-2Gy/fraction.

Low Risk
Definitive external beam radiotherapy (EBRT) prescribed at 70-70Gy in 1.8-2Gy/fraction.

Figure 4: Age distribution by risk for Radiotherapy patients

Conclusion
The SSWAHS Clinical Cancer Registry data collection and analysis demonstrated that all of the low and intermediate risk and a majority of the high risk prostate cancer patients who received external beam radiotherapy within this area health service received treatments that aligned with the recommended definitive radiotherapy treatment dose.

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Acknowledgement
Thanks to Dr Mark Sidhom for his support and clarification of clinical issues.

References

Results
Incidence
51 prostate cancers were identified in SSWAHS making it the most common cancer occurring in the local male population and the 6th most common cancer overall in the area in 2007, with 28% of treated patients residing outside the catchment area.

Colorectal
Breast
Respiratory
Upper G
Haematopoietic
Prostate
Urogenital
Neurological
Head and Neck
Gynaecological
Miscellaneous
Melanoma

Treatment
68% of patients received treatment for their prostate cancer in SSWAHS public facilities.
• 43% received Prostatectomy (n=139)
• 56% received Radiotherapy only (n=56)
• 4% received Radiotherapy and Hormones (n=12)

At Diagnosis 35 7%
100-120 8 2%
120-140 21 5%
140-160 38 8%
160-180 58 14%
180-200 120 29%
200-220 122 29%
220-240 148 36%
240-260 216 51%
260-280 41 9%
280-300 13 3%
Unknown 104 24%

Radiotherapy
211 53%
Surgery 32 8%
Hormones 172 43%

Radiotherapy 56 13 38 4 1
Surgery 119 8 56 17 37
Hormones 172 0 77 93 2

Figure 3: Treatment distributed by risk

Figure 4: Risk stratification

Figure 5: Age distribution by risk for Surgery patients

Figure 6: Age distribution by risk for Radiotherapy patients

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