International regional working groups on prostate cancer: results of consensus development

Laurence H. Klotz, MD,[1] Yves Fradet, MD[2]

[1]Division of Urology, Sunnybrook & Women's College Health Sciences Centre, University of Toronto, Toronto, Ontario, Canada
[2]Department of Urology, Laval University, Hotel-Dieu de Quebec, Quebec City, Quebec, Canada

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At the first Global Urologic Oncology Congress — which was held in conjunction with the SIU meeting in Honolulu, Hawaii, on October 2-3, 2004 — a total of 250 urologists from nine regions throughout the world participated in working groups to develop consensus statements about the management of prostate cancer patients. The focus was on two areas of prostate cancer: first, screening and detection — including when to do a biopsy, and how to manage low-risk patients — and second, management of high-risk patients.

Conclusion: *Overall, there is marked global diversity of beliefs about optimal screening and management of patients with low- or high-risk localized prostate cancer. This diversity likely reflects regional differences in epidemiologic factors, resources, and treatment patterns. Participating in the process of trying to develop international practice consensus gives urologists the opportunity to broaden their perspective about handling common clinical scenarios.*

Introduction

The first Global Urologic Oncology Congress was held in conjunction with the SIU meeting in Honolulu, Hawaii, on October 2-3, 2004. Meeting attendees who registered for this congress participated in working groups. The goal of the working groups was to develop a consensus statement about common scenarios related to first, screening and early detection of prostate cancer, and second, management of high-risk localized prostate cancer.

The meeting's 250 attendees originated from nine regions: United States (12 attendees); Canada (15); Asia-Pacific (13), comprised of Bangladesh, China, India, Malaysia, Myanmar, Pakistan, Philippines, Singapore, Taiwan, and Vietnam; Africa; Central Europe, comprised of Austria, Belarus, Bosnia, Bulgaria, Czech Republic, Estonia, Germany, Hungary, Latvia, Lithuania, Poland, Russia, Slovakia, and Switzerland; Southern Europe, comprised of Greece, Italy, Portugal, Spain, and Turkey; Western Europe, comprised of Belgium, Denmark, France, Iceland, Ireland, the Netherlands, Sweden, and the United Kingdom; South America (7), and Japan/South Korea (10).

Each regional group of about 10 to 50 attendees was provided with the scenarios listed below: nine questions related to screening and early detection of prostate cancer — including when to do a biopsy, and how to manage low-risk patients, and three questions related to management of high-risk localized prostate cancer.

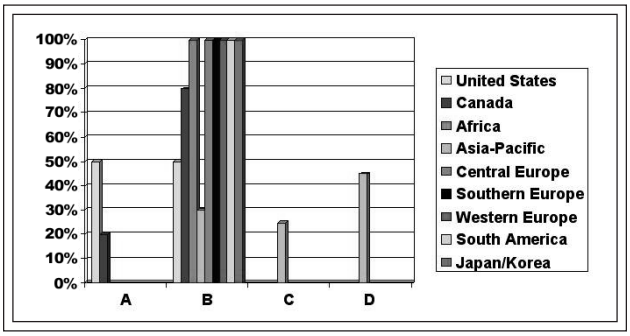
The groups met for 2 hours and tried to develop a consensus. Where a consensus was not reached, the variations in views were recorded.

Address correspondence to Dr. Laurence H. Klotz, Division of Urology, Sunnybrook & Women's College Health Sciences Centre, 2075 Bayview Avenue, # MG 408, Toronto, Ontario M4N 3M5 Canada

Questions

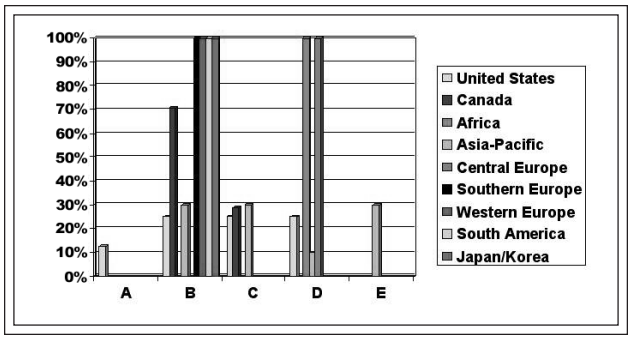
Part I. Detection and screening

1. Regarding screening and early detection in my region, the following statement most closely reflects my views:
   a. All men above age 40 should have an annual prostate-specific antigen (PSA) test
   b. All men between 50 and 70, and men over 40 with positive risk factors, should have an annual PSA test
   c. PSA screening is warranted only for high-risk patients (black men and/or those with a strong family history)
   d. PSA screening should not be carried out routinely



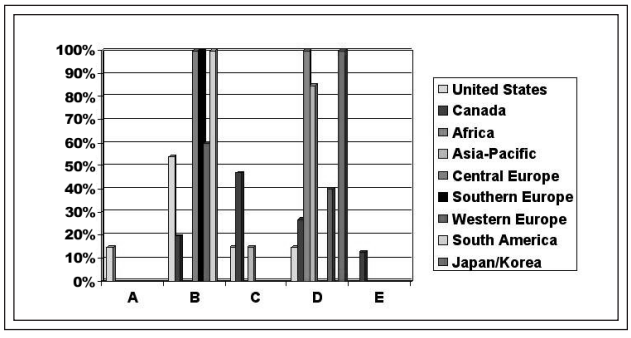
Considering the uncertainty reflected in the literature about the benefits of screening, respondents to this question showed a remarkable degree of consensus. With the exception of the Asian-Pacific group, most groups supported the traditional approach to screening, i.e., men between age 50 and 70 should be screened. In North America, there was a trend to early initiation of screening. In Asia, there was support for a restricted approach to screening. Of note, Asian regions with historically low prostate cancer mortality rates have reported a dramatic increase in the last decade; prostate cancer is now the third most common cancer in the Philippines, and the fifth most common cancer in Singapore.

2. Assuming that a decision has been made to perform PSA screening, the frequency should be:
   a. All men between age 40 and 80, annually
   b. Men between age 50 and 75, annually
   c. Men between age 50 and 75, every 2 years
   d. Men between age 50 and 75, every 5 years (assuming their baseline PSA value is low)
   e. Other



There was wide global variation in the recommended screening interval. Some participants proposed lengthening the screening interval if the initial PSA is low (< 1.0 ng/mL).

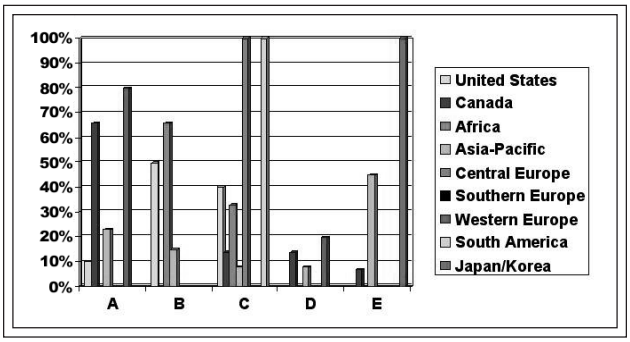
3. A 55-year-old man has an elevated PSA. Digital rectal examination (DRE) reveals he has a 30 cc benign prostate. His indication for a biopsy would be an elevated PSA level of:
   a. > 2.0 ng/mL
   b. >2.5 ng/mL
   c. >3.5 ng/mL
   d. > 4.0 ng/mL
   e. Other



There is wide global variation in the optimal PSA threshold for biopsy. No participants selected option "e," a PSA value other than from > 2 to >4 ng/mL. Several confounding factors were identified, including differences in prostatic volume between Asian regions and Western countries, and the need for PSA reference ranges based on Asian patients.

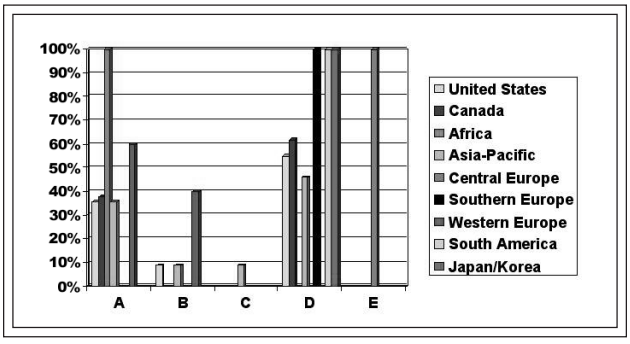
4. A 55-year-old man has an elevated PSA level. DRE reveals he has a 30 cc benign prostate. His free/total (F/T) PSA ratio is 10%. I would perform a biopsy if his total PSA was:
   a. Any value (I would biopsy regardless of total PSA in a patient with a low F/T PSA ratio)
   b. > 2.0 ng/mL

c. > 2.5 ng/mL
d. > 3.5 ng/mL
e. > 4.0 ng/mL



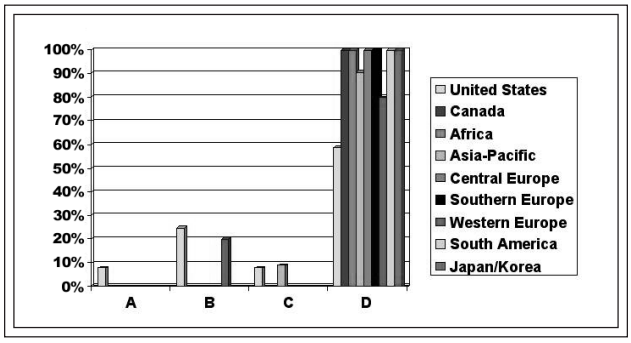
For most clinicians, the F/T PSA ratio has no significant effect on the PSA threshold used for biopsy. There are some important exceptions; in Japan, 60% of participants utilize F/T PSA ratio for making decisions about whether to do a biopsy.

5. A 65-year-old healthy male has a PSA of 4.5 ng/mL. DRE reveals a 35 cc benign prostate. Biopsy reveals a single microfocus (1 mm) of Gleason 3+3=6 adenocarcinoma. Optimal management is:
   a. Active surveillance
   b. Brachytherapy
   c. External beam irradiation
   d. Radical prostatectomy
   e. Other



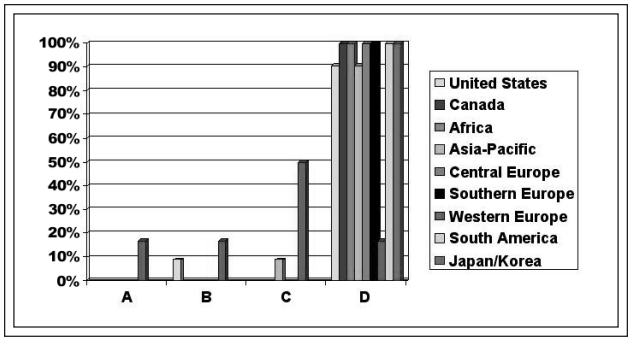
There is a diversity of opinions on the management of patients with a low risk of cancer. This was seen both between and within regions. Unavailability of brachytherapy restricted this choice in some areas. Option E (patient choice) was generated by participants from Central Europe.

6. A 65-year-old healthy male has a PSA of 4.5 ng/mL. DRE reveals a 35 cc benign prostate. Biopsy reveals 3/10 cores (all on the right side) positive for Gleason 3+3=6 adenocarcinoma. 10% of each core is involved. Optimal management is:
   a. Active surveillance
   b. Brachytherapy
   c. External beam irradiation
   d. Radical prostatectomy



For low-risk patients with more extensive disease, there is a definite worldwide consensus for radical prostatectomy.

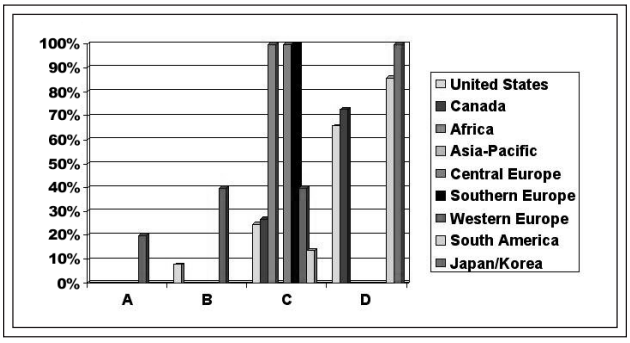
7. A 65-year-old healthy male has a PSA of 4.5 ng/mL. DRE reveals a 35 cc benign prostate. Biopsy reveals Gleason 3+3=6 adenocarcinoma in 6/10 cores bilaterally. 80% of the right-side cores and 20% of the left-side cores are involved. Optimal management is:
   a. Active surveillance
   b. Brachytherapy
   c. External beam irradiation
   d. Radical prostatectomy



For low-risk patients with more extensive disease, there is an international consensus for radical prostatectomy. Some participants from Japan, however, prefer primary hormone therapy for these patients.

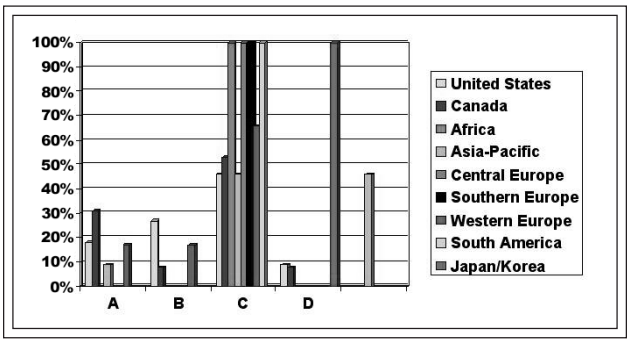
8. The same patient as in question 7 is 70 years old instead of 65 years old. Optimal management is:

a. Active surveillance
b. Brachytherapy
c. External beam irradiation
d. Radical prostatectomy



For older (age 70) low-risk patients with more extensive disease, there is a shift towards management with external beam irradiation.

9. The same patient as in question 7 is 75 years old instead of 65 years old. Optimal management is:
   a. Active surveillance
   b. Brachytherapy
   c. External beam irradiation
   d. Radical prostatectomy

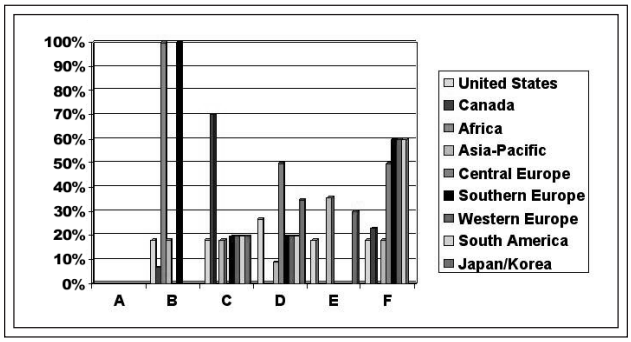


Again, for even older (age 75) low-risk patients with more extensive disease, there is a shift towards greater management with external beam irradiation.

Part II. High-risk Prostate Cancer

1. A 55-year-old healthy male develops moderate voiding symptoms over a 6-month period. He has a PSA of 22 ng/mL. DRE reveals a T2b nodule involving about 50% of the gland on the left side. TRUS shows a 1.5 x 2 cm hypoechoic nodule in the left base. Seminal vesicles appear normal. Biopsy shows Gleason 8 prostate cancer involving 4/10 cores on the left side. There is involvement of 40% of the surface area. A staging work-up, including bone scan and CT scan of the pelvis, is negative.

   Optimal management is:
   a. External beam irradiation
   b. External beam irradiation plus adjuvant androgen deprivation
   c. Radical prostatectomy, with surveillance until PSA progression (regardless of margins)
   d. Radical prostatectomy with adjuvant radiation for positive margins
   e. Radical prostatectomy with adjuvant or neoadjuvant hormone therapy for positive margins
   f. Radical prostatectomy with androgen deprivation and adjuvant radiation for positive margins

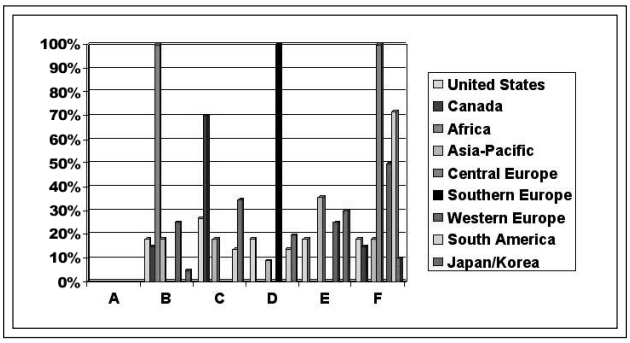


The responses reflected a marked diversity of views, both between and within regions. Many respondents indicated that they believe surgery has a role for high-risk patients, particularly when it is combined with adjuvant therapy. The Asian-Pacific respondents were split between patient management by radiation and androgen deprivation versus radical prostatectomy with androgen deprivation and adjuvant radiation with positive margin.

2. The same patient as in question 1 for high-risk patients is 65 years old instead of 55 years old. Optimal management is:
   a. External beam irradiation
   b. External beam irradiation plus adjuvant androgen deprivation
   c. Radical prostatectomy, with surveillance until PSA progression (regardless of margins)
   d. Radical prostatectomy with adjuvant radiation for positive margins
   e. Radical prostatectomy with adjuvant or

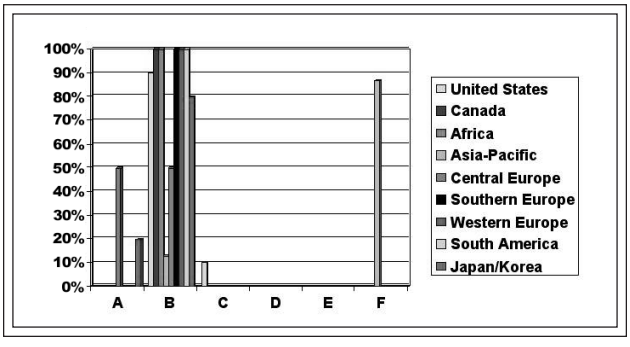
neoadjuvant hormone therapy for positive margins

f. Radical prostatectomy with androgen deprivation and adjuvant radiation for positive margins



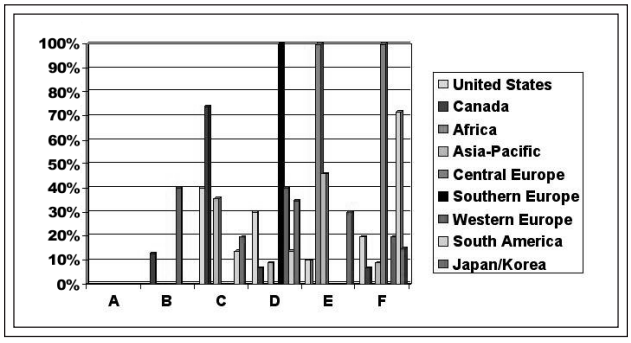
With an older high-risk patient (65 vs 55), in some regions, respondents had more diverse views; in other countries, respondents had a greater consensus. Worldwide, there is no consensus about management of this type of patient.

3. The same patient as in high-risk question 1 is 75 years old. Optimal management is:
   a. External beam irradiation
   b. External beam irradiation plus adjuvant androgen deprivation
   c. Radical prostatectomy, with surveillance until PSA progression (regardless of margins)
   d. Radical prostatectomy with adjuvant radiation for positive margins
   e. Radical prostatectomy with adjuvant or neoadjuvant hormone therapy for positive margins
   f. Radical prostatectomy with androgen deprivation and adjuvant radiation for positive margins



With older (age 75) high-risk patients, respondents in most regions had a consensus that radiation with androgen deprivation is the treatment of choice. Respondents from several regions (Western Europe, Asian-Pacific) indicated that primary hormone ablation would be their treatment of choice. Asian-Pacific respondents indicated that one option is orchidectomy alone. Respondents from Japan/South Korea indicated a preference for external beam irradiation plus adjuvant androgen deprivation.

4. A 55-year-old healthy male develops moderate voiding symptoms over a 6-month period. He has a PSA of 9.5 ng/mL. DRE reveals a T2b nodule involving about 50% of the gland on the left side. Biopsy shows Gleason 8 prostate cancer involving 4/10 cores on the left side. There is involvement of 40% of the surface area. A staging work-up, including bone scan and a CT scan of the pelvis, is negative. Optimal therapy is:
   a. External beam irradiation
   b. External beam irradiation plus adjuvant androgen deprivation
   c. Radical prostatectomy, with surveillance until PSA progression (regardless of margins)
   d. Radical prostatectomy with adjuvant radiation for positive margins
   e. Radical prostatectomy with adjuvant or neoadjuvant hormone therapy for positive margins
   f. Radical prostatectomy with androgen deprivation and adjuvant radiation for positive margins



In a young patient with high-grade localized disease, there was a wide diversity of opinion regarding optimal management, particularly with respect to the role of adjuvant therapy. Some regions (e.g. Central, Southern, and Western Europe) were unanimous about adjuvant therapy, but each preferred a different approach. Other regions held widely diverse views about the role of adjuvant therapy.

Conclusion

There is marked diversity around the world with respect to the approach to screening, and to management of low-risk, and high-risk localized prostate cancer. The degree of diversity varies; in some regions, a consensus exists regarding a specific approach, whereas in other regions, there is a complete lack of consensus on the same issue. This range of approaches undoubtedly reflects local epidemiologic factors, resource issues, and the influence of local opinion leaders and regional treatment patterns. International consensus development, based on regional patterns of practice, provides an opportunity for practitioners around the world to broaden their perspective on the management of common clinical scenarios in prostate cancer. □