Clinically Localized Prostate Cancer: AUA/ASTRO/SUO Guideline

About the Guideline

- The guideline panel consisted of 11 physicians and one patient representative. All contributing physicians are members of the American Urological Association (AUA), the American Society for Radiation Oncology (ASTRO), or the Society of Urologic Oncology (SUO).
- The guideline was approved by the AUA Board of Directors in April 2017.
- The purpose of this guideline is to provide a structured clinical framework to stratify the severity of localized prostate cancer to guide implementation of management options.

Key Clinical Considerations

Shared decision-making

- The patient should be involved in making treatment decisions and the discussion should include the following: cancer severity (risk category), patient values and preferences, life expectancy, pretreatment functional status and genitourinary symptoms, expected posttreatment functional status, and potential for salvage treatment.
- Discussions should include healthy lifestyle habits that address obesity and weight loss options and smoking cessation, as appropriate.
- Encourage patient to meet with several prostate cancer specialists, including a urologist, radiation oncologist, and medical oncologist, prior to beginning his treatment regimen to assist in making an informed decision about surgery, radiation, and/or other options.
- Discuss the short and long-term side effects of potential cancer treatments with the patient prior to deciding which treatment(s) is most appropriate.
- Inform patients about the availability and accessibility of clinical trials as a treatment option.

Care options by risk group

- Very low-risk/low-risk localized prostate cancer
  - Routine imaging (computerized tomography [CT] and bone scan) should not be done to stage the cancer.
  - Active surveillance is the best available treatment option for patients with very low-risk disease.
  - Active surveillance is the preferred option in patients with low-risk disease.
  - Prostatectomy or radiation may be offered to low-risk patients with a high probability of disease progression.
  - Androgen deprivation therapy (ADT) can be used in low-risk patients prior to brachytherapy in an effort to shrink the size of the prostate.
  - In low-risk patients, whole gland cryosurgery is a treatment option; however, patients should be informed of the high incidence of side effects after cryosurgery.
  - High intensity focused ultrasound (HIFU) and focal therapy are not standard treatment options for low-risk patients.
  - Treatment is not recommended for men diagnosed with low-risk prostate cancer who have a life expectancy of less than five years.
In low-risk patients, biomarkers such as genomic classifier (GC), genomic prostate score (GPS), and cell cycle progression (CCP) are not used to determine treatment options.

- Intermediate-risk prostate cancer
  - Consider abdominal-pelvic CT or MRI and bone scan to evaluate for metastasis with unfavorable intermediate-risk localized prostate cancer.
  - Either prostatectomy or radiation with ADT are standard treatment for intermediate-risk patients.
  - Favorable intermediate-risk cancer can be treated with radiation alone; however, research suggests ADT and radiation in combination is a superior treatment.
  - Cryosurgery may be an option depending on the patient's life expectancy, preference, and comorbidities.
  - Active surveillance may be offered to patients with favorable intermediate-risk cancer, but the patient should be informed there is a higher chance of metastasis with this method compared to other treatment options.
  - Treatment is not recommended for men diagnosed with intermediate-risk prostate cancer who have a life expectancy of less than five years.
  - HIFU and focal therapy are not standard treatment options for intermediate-risk patients.

- High-risk prostate cancer
  - Perform CT or MRI and bone scan for staging purposes with high-risk prostate cancer.
  - Standard treatment includes prostatectomy or radiation with ADT.
  - Cryosurgery, HIFU, and focal therapy are not standard treatment options for high-risk patients.
  - Treatment is not recommended for men diagnosed with high-risk prostate cancer who have a life expectancy of less than five years.
  - Offer ADT treatment to symptomatic patients with limited life expectancy.
  - Refer to a genetic counselor for patients and their family if there is a prominent family history of cancer including breast, ovarian, or pancreatic cancer, gastrointestinal tumors, and lymphoma.

Recommended approaches/specific care options
- Active surveillance
  - Patients who choose this approach will need accurate disease staging and image-guided (ultrasound or MRI) biopsy.
  - Routine prostate-specific antigen (PSA) levels should be performed every 3 to 6 months, and digital rectal exams should be performed annually.
  - Follow-up biopsies should be completed within 2 years of the initial biopsy to confirm the diagnosis and every 3 to 5 years as surveillance, until surveillance frequency has been reduced from “active” to “watchful waiting.”
  - Consider prostate magnetic resonance imaging (MRI) to monitor for disease progression.
  - Tissue based genomic biomarkers are not recommended for routine follow-up.
  - If the patient’s PSA level rises, his Gleason score rises, or lesion growth is noted, the health care provider should discuss a more definitive treatment plan.
• Prostatectomy
  o Prostatectomy is most likely to benefit younger patients (< 65 years old or > 10-year life expectancy) for disease control.
  o With this surgery, older men experience permanent erectile dysfunction and urinary dysfunction more often than younger men.
  o There are different options for how the surgery is performed; however, all have shown similar results in patient outcomes.
  o Robotic and laparoscopic surgeries result in less blood loss during the procedure.
  o Nerve-sparing surgery is proven to result in better erectile function versus non-nerve sparing surgery.
  o Consider pelvic lymphadenectomy for patients with unfavorable intermediate or high-risk disease but educate patient on common complications, including lymphocele.
  o For patients with intermediate and high-risk prostate cancer, adjuvant radiation therapy should be discussed if extensive cancer is found during surgery.

• Radiation therapy
  o Low-risk patients have the option of receiving external beam radiation or brachytherapy.
  o Favorable intermediate-risk patients may have external beam, brachytherapy, or a combination of both as a treatment option.
  o High-risk patients receiving external beam radiation, or external beam radiation and brachytherapy, may also require 2 to 3 years of ADT.
  o ADT with radiation increases the risk and severity of sexual dysfunction.
  o Proton beam therapy has no advantage over other forms of radiation.
  o Brachytherapy can worsen urinary obstructive symptoms.

• Whole gland cryotherapy
  o Consider whole gland cryotherapy for low- and intermediate-risk patients who are not candidates for prostatectomy or radiation, but who still have more than 10 years of life expectancy.
  o Using ADT simultaneously with whole gland cryotherapy can reduce prostate size.
  o Patients who have had prior transurethral resection of the prostate may not be candidates for cryotherapy.
  o Erectile dysfunction is an expected outcome from cryotherapy.
  o Urinary incontinence, obstruction, and/or irritation may be present after cryotherapy.
  o Utilize third or higher generation, argon-based cryosurgical treatment.

• High intensity focused ultrasound (HIFU) therapy
  o HIFU should be done only within a clinical trial setting.
  o Further research is needed to determine the effectiveness in treating localized prostate cancer.

• Focal therapy
  o Focal therapy involves the destruction of the prostate using ablation.
  o It should be done only within a clinical trial setting.

Outcome expectations and quality of life
• Sexual dysfunction is common after a prostatectomy and radiation, and it is worse in patients who undergo whole gland cryosurgery.
• Urinary problems may arise after radiation is complete.
• Patients who have had a prostatectomy may experience relief of obstructive urinary issues; however, incontinence may develop, and in some patients, it can persist long term.
• Proctitis may develop after radiation and may be long term in some patients.

Posttreatment follow-up
• Monitor lab work (PSA level) at predetermined timeframes based on the treatment received.
• Discuss with the patient his individualized risk-based estimate of recurrence. Many factors are evaluated to determine prognosis, including tumor grade, stage, age, race, and family history.
• Provide the patient with community resources for cancer survivors, symptom management, and emotional/psychosocial support.

Reference:

Link to Practice Guideline: