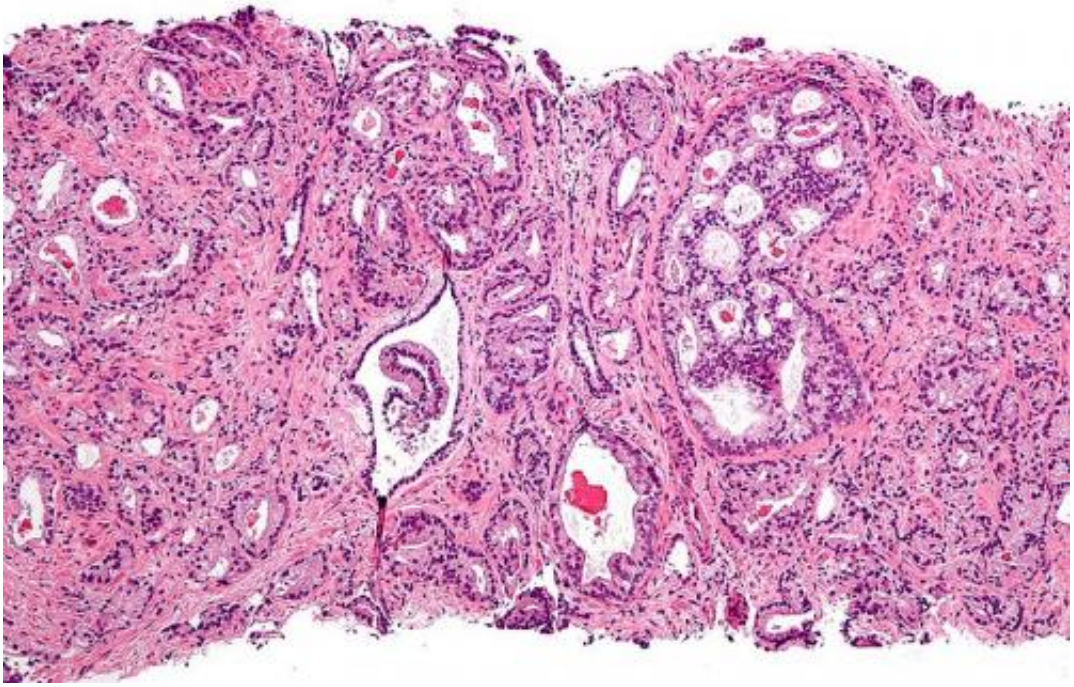
More than three percent of men on active surveillance for prostate cancer may have metastases

April 11 2016



Micrograph showing prostatic acinar adenocarcinoma (the most common form of prostate cancer) Credit: Wikipedia, CC BY-SA 3.0

Radical treatment such as surgery and radiation for localized prostate cancer may cause significant side effects. Active surveillance is increasingly accepted as an option for treating patients with clinically insignificant disease to maintain their quality of life. Despite close

monitoring, however, metastatic disease develops in a small number of men on active surveillance. About three percent of patients on surveillance had metastasis by a median of seven years after diagnosis. This risk increased to ten percent in patients with Gleason score (GS) 7, according to new research published in the *Journal of Urology*.

Prostate specific antigen (PSA) screening has enhanced the early diagnosis and treatment of prostate cancer. Currently approximately 40% of newly diagnosed patients are found to have low risk prostate cancer, characterized as GS 6 or less with PSA 10 ng/ml or less. Active surveillance is an approach to manage low and low-intermediate risk prostate cancer, which is designed to reduce harm from over diagnosis and overtreatment.

Investigators at the Sunnybrook Health Sciences Centre, University of Toronto initiated a prospective cohort study in 1995 to assess the risk factors for metastases in patients on active surveillance. "This is a detailed analysis of thirty patients initially treated with surveillance for what was thought to be favorable disease, but which eventually progressed to metastatic disease," explained Laurence Klotz, MD, FRCS(C), Professor of Surgery at the University of Toronto. "We previously reported on five such patients. The current report represents a considerably larger group with longer follow-up, which presented an opportunity for risk analysis."

Of the 980 patients analyzed, 211 (21.5%) were classified as intermediate risk, 109 (11.1%) had baseline PSA greater than 10 ng/ml and 133 (13.6%) had GS 7 disease. The investigators analyzed the clinical and pathological correlates of surveillance in patients who eventually experienced metastasis. The median follow-up was 6.3 years (range 0.2 to 20.2).

The researchers confirmed that active surveillance appears safe in

patients at low risk and in select patients at intermediate risk, particularly those with GS 6 and PSA greater than 10 ng/ml. Metastasis developed in three percent (30 of 980) of patients. Of the 980 patients, 211 were classified at intermediate risk. Fifteen died of prostate cancer and four died of another cause while 11 were living with metastases at the close of the study. Metastases developed in bone in 18 patients (60%) and in lymph nodes in 13 (43%). The risk of metastasis increased to ten percent (13 of 133) in patients with GS 7 disease.

Patients with elements of Gleason pattern 4 on diagnostic biopsy were at increased risk for eventual metastasis when treated with an initial conservative approach. "The presence of Gleason pattern 4 on diagnostic biopsy conferred a threefold to fourfold increased risk of metastatic disease," noted Dr. Klotz. "Such patients should be offered surveillance with caution. Further evaluation with magnetic resonance imaging and/or genetic biomarkers should be strongly encouraged if surveillance is elected as an option in these patients."

"The researchers may be overly optimistic about the safety of surveillance, particularly in patients with Gleason 7 disease," commented Michael O. Koch, MD, Chairman of the Department of Urology at Indiana University School of Medicine. "Since median follow-up was only 6.3 years, the number of patients with Gleason 7 disease in whom metastases develop will grow even further. As of now active surveillance would appear to be ill-advised in this group of patients."

"The reported rate of three percent is a best case scenario and it is likely that many more men have metastatic disease," observed Joel B. Nelson, MD, Professor and Chairman of the Department of Urology at the University of Pittsburgh Medical Center. "Active surveillance is obviously safe in men who do not progress. The task now is to avoid misclassification of disease as indolent when it is not and detect progression before it is too late."

More information: "Metastatic Prostate Cancer in Men Initially Managed with Active Surveillance," by Toshihiro Yamamoto, Bindu Musunuru, Danny Vesprini, Liying Zhang, Gabriella Ghanem, Andrew Loblaw, and Laurence Klotz, The *Journal of Urology*, published online in advance of Volume 195, Issue 5 (May 2016)

Provided by Elsevier

Citation: More than three percent of men on active surveillance for prostate cancer may have metastases (2016, April 11) retrieved 10 December 2023 from https://medicalxpress.com/news/2016-04-percent-men-surveillance-prostate-cancer.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.