Prostate cancer screening

It’s YOUR decision!
For many years now, a test has been available to screen for prostate cancer. The test is called the prostate-specific antigen blood test (or PSA test). It is used in combination with a digital rectal examination. However, whether or not these tests are actually useful for screening purposes – that is, for detecting prostate cancer in men who do not have any signs or symptoms of cancer – is still controversial. Given the uncertainties surrounding the use of this test, some men may choose to have the test, while others may not.

The Collège des médecins du Québec recommends that doctors discuss the pros and cons of PSA testing combined with a digital rectal exam with patients between 55 and 70 years of age who have a life expectancy of 10 years or more and make sure they clearly understand the issues before making a decision about whether or not to undergo screening.

To provide an update on the topic, the Collège des médecins du Québec has prepared this pamphlet in collaboration with the Institut national d’excellence en santé et en services sociaux (INESSS) du Québec. The content of this pamphlet is based on the recommendations of a group of experts and on discussions with representatives of the public.

The purpose of this leaflet is to provide you with the information you need to discuss prostate cancer screening with your doctor and to help you make your own decision.

**SCREENING: A DECISION YOU HAVE TO MAKE**

Prostate cancer is the most common type of cancer found in men. However, for most men who are diagnosed with prostate cancer, usually at an advanced age, it has little effect on duration or quality of life. Unfortunately, for some men, the disease will have serious consequences and they will develop metastases and die.

We would like to be able to identify and treat all men who might develop metastases and die from this cancer as quickly as possible and not bother with all the rest. Unfortunately, this isn’t possible. The PSA test combined with a digital rectal exam, which is the most accurate method of screening, has advantages, but also limitations and disadvantages.

The decision about whether or not to undergo screening depends on how important each of these advantages, limitations and disadvantages is to you.

**IMPORTANT!**

If you are worried about changes in your urination habits (difficulty urinating, more frequent urination), this is not screening; talk to your doctor about it.
KNOW THE PROS AND CONS OF PROSTATE CANCER SCREENING

The table below is a summary of what might happen depending on whether or not a man receives screening. In the left-hand column, imagine 100 men who start to have annual prostate cancer screening at age 55, who do so every year until age 70 and who are followed until the end of their life. For comparison, in the right-hand column, imagine another 100 men of the same age who do not have screening and who are also followed until the end of their life.

Look carefully at the numbers. They are the most optimistic screening outcomes based on the results of a large study conducted in Europe. By optimistic, we mean the outcomes most in favour of screening. They give a clear picture of the pros and cons of screening.

<table>
<thead>
<tr>
<th>100 men who receive screening</th>
<th>100 men who do not receive screening</th>
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<tbody>
<tr>
<td><strong>Prostate cancer diagnosis</strong></td>
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<tr>
<td>18 are diagnosed with prostate cancer; 15 as a result of screening and 3 because they developed symptoms, either between screening tests or after the age of 70</td>
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<td>11 are diagnosed with prostate cancer after developing symptoms (most after the age of 70)</td>
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<td>82 are not diagnosed with prostate cancer</td>
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<tr>
<td>89 are not diagnosed with prostate cancer</td>
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<tr>
<td><strong>Prostate cancer metastases</strong></td>
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<tr>
<td>3 develop metastases</td>
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<td>4 develop metastases</td>
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<td>97 do not develop metastases</td>
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<tr>
<td>96 do not develop metastases</td>
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<td><strong>Deaths from prostate cancer</strong></td>
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<tr>
<td>2 die of prostate cancer</td>
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<tr>
<td>3 die of prostate cancer</td>
<td></td>
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<tr>
<td>16 who are diagnosed with prostate cancer die of other causes</td>
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<tr>
<td>8 who are diagnosed with prostate cancer die of other causes</td>
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THE PROS

- **Being reassured that you don’t have prostate cancer**

You can be reassured that you don’t have prostate cancer, which could have serious consequences for your health. The table shows that when cancer is not detected after screening in 100 men who are screened regularly, only 3 are diagnosed with prostate cancer between screening tests or after 70 years of age. But it isn’t 0! Sometimes screening does not detect serious cancers. Furthermore, you should know that out of 100 men who are not screened, a minority (11) will be diagnosed with prostate cancer in their lifetime.

- **Not having metastases and not dying of prostate cancer**

We can see from the table that screening means more prostate cancers are detected (18 instead of 11). Cancers diagnosed by screening are, on average, detected at an earlier stage than without screening, and treating them at this stage could prevent the spread of metastases and death from prostate cancer. As we can see from the table, according to the most optimistic data, out of 100 men between 55 and 70 years of age who have screening, an average of 1 man will not develop metastases (3 out of 100 will develop metastases compared with 4 out of 100) and 1 will not die from prostate cancer because he received screening (2 out of 100 will die of prostate cancer compared with 3 out of 100).

It is estimated that out of the 100 men who have screening, the man who does not die of prostate cancer because he received screening will live an average of 8 years longer than if he had not received screening. However, we don’t know if screening prolongs life overall, because most men die of causes other than prostate cancer.

Screening may be of greater benefit to men who have a higher risk of developing prostate cancer (men whose father or brother had cancer before the age of 65 and men of African American descent) and of less benefit to those who have a lower risk.
THE CONS

■ Being worried that you might have cancer when you don’t

If either of the tests (PSA or rectal exam) is abnormal, a third procedure must be performed to confirm whether or not prostate cancer is present: a biopsy. During this test, a needle is inserted into the prostate. You might be worried about having cancer before you have the biopsy. Fortunately, most men who receive a positive screening result do not have prostate cancer. It’s a false alarm. In most cases, their prostate is simply enlarged due to age, which is called benign prostatic hypertrophy.

Whether or not cancer is detected, all men who have a biopsy may develop complications from this procedure, including pain, fever, temporary urinary difficulties and blood in their semen or urine. Approximately 33% of men believe they developed a moderate to severe complication as a result of the biopsy and up to 3 or 4% will require hospitalization for a complication.

■ Being diagnosed with cancer and having unnecessary treatments

We can see from the table that out of the 100 men who receive screening, 18 will be diagnosed with prostate cancer. As we saw earlier, only 1 man will live a longer life and die of a cause other than prostate cancer as a result of having screening. Unfortunately, it’s impossible to know which of the men with prostate cancer detected by screening will be that 1. So it could be said that the other 17 men were needlessly diagnosed: 2 die of prostate cancer anyway and 15 die of other causes, irrespective of whether or not they had their cancer detected by a screening test.

All men who have prostate cancer and receive treatment feel they owe their survival to screening. It is natural to feel this way, and difficult to think otherwise. But, for the vast majority, screening really only means that they learn that they have prostate cancer on average around 10 years earlier than if they had not had screening, without changing their fate. Furthermore, as the table shows, 6 of these men would never have known that they had prostate cancer in their lifetime if they hadn’t had screening. These men are part of what is called overdiagnosis.

Overdiagnosis, and the overtreatment it can lead to, are the main disadvantages of prostate cancer screening. Men who are thinking about having screening must understand that when prostate cancer is detected, it’s impossible to know if it is a case of overdiagnosis or not.

Most men with screening-detected prostate cancer will be treated for it and may develop complications from treatment. Radical prostatectomy, a surgical procedure to remove all of the prostate, is the most common treatment. In men who undergo surgery, around 10 to 20% experience urinary incontinence, while 40 to 50% are unable to get an erection (impotence). These complications are less frequent with radiation therapy, local treatment with radioactive rays that destroy cancer cells, but radiation can cause inflammation of the rectum and bladder. Note that to reduce complications from treatments, doctors are increasingly recommending active surveillance of low-grade cancers (cancers with a low risk of progressing). This approach involves monitoring the progress of the disease very closely by doing blood tests and prostate biopsies and providing treatment only if the cancer progresses.
WEIGHING THE PROS AND CONS

Deciding whether or not to have screening can be difficult. This is normal. It goes without saying that all men would like to have the advantages of screening without the disadvantages. Unfortunately, it doesn’t work that way. If you decide to have screening, you also have to accept that there may be disadvantages, some of which can have harmful health effects, and that screening may be of no benefit at all to you.

So, before deciding, think about what is most important to you. Read the statements below and see which ones best match what is most important to you.

I might consider having screening because:

- I’m worried I might have prostate cancer and would like to know if I do as quickly as possible.
- I want to be reassured as much as possible that I don’t have prostate cancer.
- I’m willing to accept the side effects of a prostate biopsy if I need to have one.
- I understand that screening won’t necessarily prolong my life, but I think it’s more important to do everything I can to reduce the risk of dying of prostate cancer.
- I’m willing to accept the side effects of treatment or to live with the knowledge that I have cancer.
- I’m willing to accept that the cancer detected by screening would never have caused problems during my life if it hadn’t been found.

I might consider not having screening because:

- I’m not worried I might have prostate cancer and my chances of having prostate cancer are low.
- I don’t think the screening tests we have are reliable enough.
- I don’t want to take the risk of having side effects from a prostate biopsy.
- I’m willing to accept the possibility that screening could lower my risk of dying from prostate cancer and to give up this chance if I don’t have screening.
- I don’t want to take the risk of having side effects from treatment or live with the knowledge that I have cancer.
- I’m worried my health might get worse if prostate cancer is found without there being any guarantee that I would live longer.

CONCLUSION

There is no right or wrong decision when it comes to prostate cancer screening, only the decision that is best for you. Your doctor is the best trained person to answer all your questions and help you make the decision that is right for you. Don’t hesitate to talk to him/her about it.

TO FIND OUT MORE,
visit the Collège des médecins du Québec’s Web site at
www.cmq.org