



Prostate Cancer

The Familial Link

This factsheet is for men who are concerned about “a strong family history of prostate cancer”, ie several family members diagnosed with prostate cancer over different generations. It provides information on prostate cancer and the increased risk of developing the disease if a relative has been diagnosed, particularly under the age of 55.

You should use this factsheet in conjunction with the information on prostate cancer which is available on the Orchid website.

About Prostate Cancer

Prostate cancer is the most common cancer in men in the UK. Every year over 35,000 men will be diagnosed with prostate cancer and these numbers are on the increase.

It is a disease often associated with “growing older”. About 60% of cases are diagnosed in men over the age of 70. Often in the elderly it will cause no symptoms or the symptoms may resemble those of non-cancerous prostate problems. It may not necessarily be the cause of death in those who get it. Mostly this is not due to an obvious genetic predisposition but rather happens sporadically or just by chance.

There is however a form of prostate cancer that is due to genetic inheritance. This only causes about 5% to 10% of all prostate cancers but can account for as much as 30% to 40% of early onset disease (age less than 55). On average this is diagnosed 6 to

7 years earlier from the sporadic cancer. Because of this a larger proportion of men with hereditary cancer will die from the disease than the sporadic form. (1)

The way this is handed from parent to son is not simple and as many as 12 different areas of DNA seem to be involved. This is probably why there is an increased risk of prostate cancer in families with clusters of other cancers such as breast and ovaries as well as prostate. There also appear to be other areas that are responsible for how severe, or how high the grade of the disease is. (2)

Having a relative with prostate cancer increases the risk of developing the disease by genetic inheritance. The younger the relative is when they develop cancer the more likely it is that they have the genetic form of the disease and therefore the higher the chance that they can pass it on.

The relative risk of developing prostate cancer is somewhere between 2.5 and 6.5 times higher if a first degree relative has the disease and the risk is higher if the relative is younger (less than 55) or if 2 or more relatives are affected or when the relative is a brother.

For a man of 50 the lifetime risk of getting prostate cancer or developing prostate cancer is 9.5% and the risk of dying from it is 2.9%. For a first degree relative the risk is 1.7 to 8.73 times more. (3)



Factsheet No. 4

There is as yet no genetic test for hereditary prostate cancer. The only way to reduce mortality in these families is with screening to detect the cancer at a stage when it is still curable.

Many advocate screening relatives of those with prostate cancer at a young age (less than 55) at an age of 10 years less than the age of the initial victim when they were diagnosed. For instance if a father was 50 when he was diagnosed then his sons should consider screening at the age of 40.

Conclusion

You should consider speaking to your GP or healthcare advisor about your concerns and you may wish to take this factsheet with you when you meet them.

As with most cancers, there are no clear cut causes for prostate cancer. Risk factors can include family history, increasing age and ethnicity. Taking a proactive approach to your healthcare is important. This includes being informed and aware of the possible signs and symptoms of prostate cancer, taking regular exercise and enjoying a balanced diet.

For further information and support on prostate cancer and other male cancers please visit the Orchid website at www.orchid-cancer.org.uk

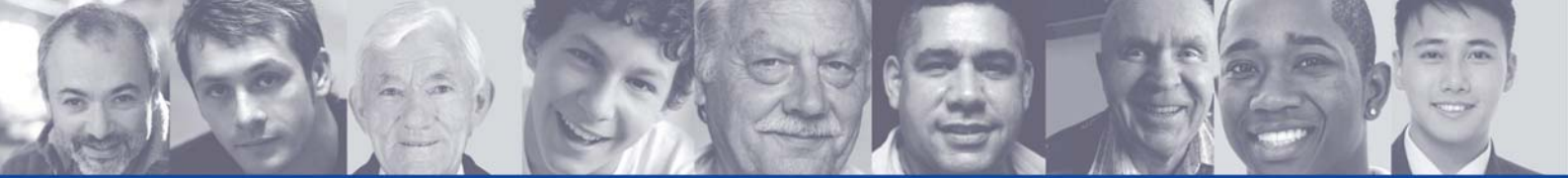
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- 2) Hum Mol Genet. 2004 Apr 1;13 Spec No 1:R103-21. Epub 2004 Jan 28.
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Factsheet No. 4

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