Prostate cancer 'may be a sexually transmitted disease'

By Michelle Roberts Health editor, BBC News online

Prostate cancer may be a sexually transmitted disease caused by a common yet often silent infection passed on during intercourse, scientists say - but experts say proof is still lacking.

Although several cancers are caused by infections, Cancer Research UK says it is too early to add prostate cancer to this list.

The University of California scientists tested human prostate cells in the lab.

They found a sex infection called trichomoniasis aided cancer growth.

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Nicola Smith Cancer Research UK
More research is now needed to confirm the link, they say in the journal Proceedings of the National Academy of Sciences (PNAS).

Sex infection
Trichomoniasis is believed to infect some 275 million people worldwide and is the most common non-viral sexually transmitted infection.

Often, a person will have no symptoms and be unaware that they have it.

Men may feel itching or irritation inside the penis, burning after urination or ejaculation, or a
white discharge from the penis.

Women may notice itching or soreness of the genitals, discomfort with urination, or a discharge with an unpleasant fishy smell.

This latest research is not the first to suggest a link between trichomoniasis and prostate cancer. A study in 2009 found a quarter of men with prostate cancer showed signs of trichomoniasis, and these men were more likely to have advanced tumours.

The PNAS study suggests how the sexually transmitted infection might make men more vulnerable to prostate cancer, although it is not definitive proof of such a link.

Prof Patricia Johnson and colleagues found the parasite that causes trichomoniasis - *Trichomonas vaginalis* - secretes a protein that causes inflammation and increased growth and invasion of benign and cancerous prostate cells.

They say more studies should now follow to further explore this finding - particularly since we still do not know what causes prostate cancer.

Nicola Smith, health information officer at Cancer Research UK, said: "This study suggests a possible way the parasite *Trichomonas vaginalis* could encourage prostate cancer cells to grow and develop more quickly.

"But the research was only done in the lab, and previous evidence in patients failed to show a clear link between prostate cancer and this common sexually transmitted infection.

"There's been a lot of research into prostate cancer risk and we're working hard to piece together the puzzle.

"But there are still no known lifestyle factors that seem to affect the risk of developing the disease - and no convincing evidence for a link with infection.

"The risk of prostate cancer is known to increase with age."

Prostate cancer is now the most common cancer in men in the UK - about one in nine men will get it at some point in their lives.

It is more common in men over 70, and there appears to be some genetic risk since the disease can run in families.