

Obesity helps drive kidney cancer cases to record high

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(Medical Xpress) -- The number of cases of kidney cancer diagnosed each year in Great Britain has risen over 9,000 for the first time, new figures from Cancer Research UK show today.

Experts believe that [obesity](#) could be one of the key factors behind the staggering 135 per cent rise in [kidney cancer](#) rates over the last 35 years.*

In 1975 there were almost 3,000 cases of the disease and it was the 14th most common cancer in Britain, but the numbers have been steadily rising in Britain since the mid-70s.

And the latest figures show that the number of cases is just over 9,000 – making it the eighth most common cancer in Britain.

Professor Tim Eisen, a Cancer Research UK kidney cancer expert, based at the University of Cambridge, said: “Over the last 10 years, Cancer Research UK has helped to develop new drugs which destroy the blood supply to the kidney cancers. These drugs control the disease in most patients but do not cure it.

“It is best to prevent the problem in the first place - maintaining a [healthy weight](#) and not smoking are the best ways of doing that.

“The other important point is to see your doctor if you have noticed blood in your urine as this can be an early sign of something wrong. If

the kidney cancer is caught early, it can often be cured by surgery.”

Some, but not all, of this increase is believed to be down to more widespread use of imaging techniques which have helped diagnose more kidney tumours.

But evidence from other studies shows there has also been a rise in the number of advanced kidney cancer cases detected – suggesting other factors are also in play.

After smoking, obesity is one of the main risk factors for kidney cancer – it increases the risk of the disease by 70 per cent.**

Cancer Research UK figures estimate that about a quarter of kidney cancer cases in men and 22 per cent in women are linked to being overweight.***

Overweight people produce higher levels of certain hormones than people of a healthy weight and this can contribute to an increased risk of several types of cancer including kidney.

While smoking rates in the UK have fallen over the last 35 years, obesity is on the rise. In the UK, figures show that nearly 70 per cent of men and almost 60 per cent of women have a BMI of 25 or more – classed as overweight.

Newscaster Nicholas Owen, who is a kidney cancer survivor, said: “It’s worrying to see the number of cases rise. But it is so important for people to go to their doctor if they experience any symptoms like blood in urine. The chances are it won’t be cancer, but if it is, spotting it early means that treatment is often easier and many more people survive.”

Sara Hiom, director of information at Cancer Research UK, said: “Too few people know about the significant cancer risks associated with being

very overweight. While giving up smoking remains the best way to cut your chances of developing kidney cancer, the importance of keeping a healthy weight shouldn't be overlooked.

“Obesity is not only linked to kidney cancer but six other types of cancer and other diseases as well.

“Kidney cancer survival rates have greatly improved over the last 35 years thanks to research funded by our generous supporters. To ensure we continue to make progress, it's really important that the disease is diagnosed as early as possible to give patients the best treatment options.

“Cancer Research UK is working with partners to raise awareness of blood in urine as a possible sign of kidney and bladder cancer and encourage people with this symptom to go to their doctor as quickly as possible.”

More information: *Rates have increased from 4.9 per 100,000 in 1975 to 11.4 per 100,000 in 2009. There were 8,848 cases in 2008 in Britain, latest figures for 2009 show 9,042 cases.

**An analysis of studies published between 1966 and 1998 by the European Prospective Investigation into Cancer and Nutrition (EPIC) found that the risk of kidney cancer increased by seven per cent for each unit increase of body mass index (BMI), which is linked to a 35 per cent risk increase for overweight individuals and a 70 per cent increase for obese individuals.

(Bergstrom, A., et al., Obesity and renal cell cancer--a quantitative review. Br J Cancer, 2001. 85(7): p. 984-90)

Obesity is linked to breast, bowel, oesophageal, pancreatic, womb, gallbladder cancers.

Chow, W.H., et al., Rising incidence of renal cell cancer in the United

States. *Jama*, 1999. 281(17): p. 1628-31.

***Ref. for Cancer Research UK estimates on cases linked to bodyweight: Parkin, D M et al., - The Fraction of Cancer Attributable to Lifestyle and Environmental Factors in the UK in 2010 (*British Journal of Cancer* 2011) [doi:10.1038/bjc.2011.474](https://doi.org/10.1038/bjc.2011.474)

In comparison, other studies have shown that on average, current smokers have a 50 per cent increase in risk of kidney cancer. The risk increases with the number of cigarettes smoked per day. People who smoke more than 20 cigarettes per day increase their risk by 60-100 per cent compared to non-smokers.

(Hunt, J.D., et al., Renal cell carcinoma in relation to cigarette smoking: meta-analysis of 24 studies. *Int J Cancer*, 2005. 114(1): p. 101-8

The lifetime risk of developing the disease is around 1 in 60 for men and 1 in around 100 for women.

12 more men in a population of a 1000 men who smoke 10-20 cigarettes per day are expected to get kidney cancer than in 1000 men who don't smoke.

(This is based on an increase risk of kidney cancer of 83 per cent for men that smoke 10 to 20 cigarettes per day and using the assumption that the average lifetime risk of getting kidney cancer in non-smokers is 1 in 67 slightly lower than the national average.)

4 more women in a population of a 1000 women who smoke 10-20 cigarettes per day are expected to get kidney cancer than in 1000 women who don't smoke .

(This is based on an increase risk of kidney cancer of 28 per cent for women that smoke 10 to 20 cigarettes per day and using the assumption that the average lifetime risk of getting kidney cancer in non-smokers is 1 in 104 slightly lower than the national average.)

6 more men in a population of a 1000 men with a BMI of 30 are expected to get kidney cancer than in 1000 men with a BMI of 25. (This is based on an increase in the risk of kidney cancer of 7 per cent for every unit increase in BMI and using the assumption that the average lifetime risk of getting kidney cancer in the whole population (1 in 60) occurs in men with a BMI of 27)

Five-year survival for kidney cancer has increased by 85 per cent from 1971-75 to 2005-09 for both men and women.

Provided by Cancer Research UK

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