Adding Chemo to Radiotherapy Halves Risk of Deadly Bladder Cancer Returning

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Bladder cancer patients given low doses of chemotherapy combined with radiotherapy were nearly 50 per cent less likely to relapse with the most lethal form of the disease compared to patients given radiotherapy alone, a major trial funded by Cancer Research UK shows today (Wednesday).

The success of the trial – led by The Institute of Cancer Research (ICR) and the University of Birmingham – could mean fewer patients need their bladder removed and provides a viable alternative for frailer patients who are too weak for surgery.

The results are published in the *New England Journal of Medicine* today.

Study co-leader Professor Nick James from the University of Birminghamsaid: “Many cases of bladder cancer are related to smoking and, with around eight out of ten cases occurring in people over 65, patients are often in relatively poor general health when diagnosed.

“Removing the bladder is still one of the most effective treatments for invasive cancer that has spread into the muscle of the bladder. But in practice we know many patients are too frail for such radical surgery.

“The alternative is to give radiotherapy, but around a third of these patients will go on to relapse with invasive disease and will need their bladder removed anyway. So these results really provide a lifeline for those too old or weak for surgery and mean that, in future, fewer patients will need their bladder removed.”

Three hundred and sixty patients from around the UK were included in the study. Around half were given two commonly used chemotherapy drugs – fluorouracil and mitomycin C – in addition to the radiotherapy treatment.

Thirty three per cent of patients receiving chemotherapy in addition to radiotherapy (known as chemoradiotherapy) had a relapse within their bladder or surrounding tissues within 2 years, compared to 46 per cent of those who had radiotherapy alone.

Among those that did relapse in the chemoradiotherapy group, around one in five had invasive cancer – the most serious form of the disease. This was compared to around one in three among those given radiotherapy alone.

Early results also showed that combining radiotherapy with chemotherapy may improve survival, with 48 per cent of patients still alive after five years, compared to 35 per cent of those who had radiotherapy alone, although larger studies are needed to confirm this.

Study co-leader Dr Robert Huddart from the ICR and The Royal Marsden NHS Foundation Trust, added: “Removing the bladder is a major operation with implications for the rest of the patient’s life. We found that adding chemotherapy to radiotherapy successfully lowered the risk of relapse sufficiently to make it a real option for patients who don’t wish to have radical surgery and lose their bladder. Importantly, these improvements have been achieved with drugs that are cheap and widely available, and carry few additional side-effects over radiotherapy alone.”

Wendy Powell is 49-years-old and lives in Birmingham where she works for Cadbury’s. She agreed to take part in the trial after tests 13 years ago revealed a tumour in her bladder “the size of a lemon”.

She said: "When I was told I had bladder cancer it was a shock at first. They went through all the options for treatment and when they mentioned the trial I decided to give it a try. I did have side-effects and it has all been a hard journey, but in the end it’s been worth it because here I am thirteen years later. I'm back to normal now and it's thanks to clinical trials that more people are surviving like me. I'm all for trials. It's really good they're coming up with new ways of treating the disease."

Each year in the UK around 10,400* people are diagnosed with bladder cancer. It is responsible for around 5,000** deaths per year. Bladder cancer is most common in older people, and is the seventh most common cancer in the UK.

Kate Law, director of clinical research at Cancer Research UK, said: “These findings provide a new ‘gold standard’ of treatment that will be particularly important for elderly patients, because surgery to remove the bladder in this age group can have a particularly severe impact on quality of life.

“Survival rates for bladder cancer have been increasing in recent years, with around half of patients now surviving 10 years or more, compared to around a third in the 1970s. But bladder cancer is largely a disease of older people and, with an ever ageing population, it’s essential that there are alternative treatments suitable for this age group.”

If you would like to support Nick’s work, please contact **Sally Brooks (mailto:s.b.brooks@bham.ac.uk)** , Development and Alumni Office, University of Birmingham - or visit the **Circles of Influence campaign site (http://www.birmingham.ac.uk/alumni/giving/circlesofinfluence/index.aspx)**

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