**Getting ‘match fit’ before chemotherapy keeps tumours in check**

Laura Donnelly HEALTH EDITOR

PREHAB schemes that prescribe exercise to cancer patients before they start chemotherapy could double the chance of tumours shrinking, trials suggest.

In recent years, the NHS has been piloting initiatives that ask those newly diagnosed with cancer to complete weeks or months of intensive exercise before treatment gets under way. The proportion of trial patients seeing tumours shrink while having chemo combined with exercise. Health chiefs have previously said such efforts may “prime” the body for recovery, helping patients to be “match fit” before their immune system comes under attack. But the initiatives have prompted some controversy, as patients are often asked to sign up for the gym within days of receiving a devastating diagnosis.

The new trial, on patients with oesophageal cancer, suggests that taking part in exercise before undergoing chemotherapy to shrink their tumour may have a significant impact.

Researchers at London’s Guy’s and St Thomas’ NHS Foundation Trust said similar effects may be seen in other types of cancer and called for exercise regimes to be more widely prescribed. Their study involved 40 participants with half asked to take part in a structured fitness programme of about 150 minutes aerobic exercise, plus two sessions of strength training every week.

This continued average for five months, until the day before surgery.

After pre-surgical chemotherapy 75 per cent of the group saw growths shrink, compared with 37 per cent of the patients treated conventionally.

Analysis of tissue samples and lymph nodes also showed those who took part in exercise were more likely to see improvements in the staging of their cancer. Such patients also had a stronger immune response and lower levels of inflammatory chemicals in their blood.

Researchers said: “Tumour downstaging and response to chemotherapy are arguably the most important prognostic factors in oesophageal cancer.

“The impact for patients is potentially significant. Further work to confirm or refute these findings is urgently required, including whether improvements in chemotherapy response may translate into a survival advantage.” In the meantime, “the present results further strengthen the rationale for exercise to be prescribed as standard care in patients undergoing treatment for cancer”, they said.

Andrew Davies, the lead researcher said: “This is a small study, but a promising one, as it shows how a moderate exercise programme could help to improve the success of chemotherapy treatment.

“We want to confirm this effect in further studies, but conceivably this may benefit patients with other types of cancer and be a cost-effective way to improve the effectiveness of treatment.”

Alan Holman, 70, a participant in the study, was diagnosed with oesophageal cancer in Dec 2016, soon after retirement.

Mr Holman said: “Once I started the chemotherapy, it was tiring, but doing an hour with the trainer, you come out feeling better. It helped to get me back to my pre-op weight and got me through the chemotherapy.

“Now I try to get to the gym once a week and get out for a walk at least once every day.”

About 10,000 people are diagnosed with oesophageal cancer in the UK each year. The findings were published in the British Journal of Sports Medicine.”