Morphine 'might spread cancer'

Morphine is routinely used to relieve pain during and after cancer surgery. Laboratory tests suggest morphine could in fact encourage the spread of cancer, for which it is routinely prescribed to relieve pain from surgery and tumours.

US scientists say the opiate promotes the growth of new blood vessels which deliver tumours oxygen and nutrients.

Speaking at a meeting of the American Association for Cancer Research in Boston, they also claim to have found a drug which counters this effect.

Cancer Research UK said more tests were needed before any changes in treatment.

Dr Patrick Singleton from the University of Chicago told the meeting of experts that in laboratory tests, morphine not only strengthened blood vessels but also appeared to make it easier for cancers to invade other tissues and spread.

But he said this could be overcome by a drug - methylnaltrexone or MNTX - developed in the 1980s to prevent morphine-related constipation but only recently approved in the US. It appears to work without interfering with the pain-relieving properties of the opiate.

'Long history'

In mice with lung cancer, MNTX inhibited the apparent tumour-promoting effects of opiates, and reduced the spread of cancer in the mice by 90%.

"If confirmed clinically, this could change how we do surgical anaesthesia for our cancer patients," said Dr Singleton, assistant professor of medicine at the University of Chicago Medical Center and principal author of the research.

"It also suggests potential new applications for this novel class of drugs which should be explored."

The tests were started after his colleague, anaesthetist Jonathan Moss, noted that several patients receiving this kind of opiate blocker survived longer than might be expected after
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Dr Laura Bell of Cancer Research UK said the drugs had a long history of providing effective pain relief.

"Research in this area is in the early stages, so it's too early to tell whether opiate-based painkillers have an effect on cancer growth.

"Much more research would be needed to justify changing the way opiates are used to treat people with cancer."