

Intelligent Knife

Scientists have developed an "intelligent knife" that can tell surgeons immediately whether the tissue they are cutting is cancerous or not.

In the first study to test the invention in the operating theatre, the "iKnife" diagnosed tissue samples from 91 patients with 100 per cent accuracy, instantly providing information that normally takes up to half an hour to reveal using laboratory tests.

It provides a result almost instantly, allowing surgeons to carry out procedures with a level of accuracy that hasn't been possible before. They believe it has the potential to reduce tumour recurrence rates and enable more patients to survive.

Mr Kevin O'Neill, neurosurgeon at Charing Cross Hospital, is using the iknife in brain tumour operations but this is still at the training stage. It is possible, due to the tumour type being identified immediately, that other treatments will eventually be given alongside surgery, making these more effective.