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Israel performs pioneer sunlight surgery

By Ania Lichtarowicz
BBC health reporter

Doctors in Israel have successfully used sunlight to perform surgery on rats.

The procedure, explained in the journal Nature, would only work in sunny climates, but could one day provide a low-cost alternative to conventional laser treatments.

Laser surgery is used often to remove tumours by simply burning them out, instead of traditional techniques of physically cutting them out of the body with a scalpel.

This latest research shows it could be possible to produce similar results with concentrated sunlight instead of costly laser treatment.

In this experiment, Jeffrey Gordon and colleagues, from Ben Gurion University, Sede Boqer, Israel, transported sunlight into the operating theatre from outside through a system of optical fibres.

These concentrated rays - which contained several watts of energy - were then directed on to the livers of two rats for just a few minutes.

The tissue was seen to wither and die in the same way as it would after laser treatment.

The rats recovered well following the surgery; and after detailed analysis of the livers, the scientists found the treatment had worked as well as a laser.

Not only could this solar surgery be a cheap alternative to laser therapy in sunny countries, it also appears to be safer for the surgeons to use.



Sunlight surgery may one day supplant the laser

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