

Spider pill to seek out diseases

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'Spider pill'. Image: BBC News

(PhysOrg.com) -- A remotely controlled 'spider pill' with eight moving legs and a miniature camera may become the next tool of choice in diagnosing cancers of the stomach and colon.

The little [robot](#) pill was invented by a group of scientists in Italy, who were looking for an alternative to endoprobes, which are not well accepted by patients.

The 'spider pill' would be swallowed by the patient and then controlled by the doctor, who would extend and activate the device's tiny legs by wireless radio, and make the gadget crawl around inside the patient's [stomach](#) or intestines, rather like a spider. The spider pill can be manipulated to look for signs of disease and relay images from the

camera to the doctor.

Swallowing a pill is much less invasive and uncomfortable for the patient than an endoscope, according to Italian cancer specialist Dr Enrico Grasso of the University Hospital Tor Vergata in Rome. Many patients find endoscopy so uncomfortable they refuse the treatment, even though it is extremely effective in diagnosing disease. With a simple pill to swallow, more people may be willing to be screened for cancer.

The spider pill would also help doctors, giving them much more flexibility than manipulating an endoprobe, which is a long tube rather resembling a snake. It can be made to walk back and forwards, and go anywhere the doctor wants to check. After the examination is finished, the spider pill legs are withdrawn and it is allowed to exit the body naturally.

The device has been tested in a pig, but further refinements are needed to make the pill smaller before it can be released for general use.

A pill containing a camera is not a new invention, but previous pills could not be controlled after being swallowed, except those that swim in liquid environments such as the stomach. A crawling spider pill that can be controlled remotely anywhere in the alimentary canal after being swallowed is a first.

More information: BBC News [video](#)

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