

## Health Infertility linked to bacterial infection



Scientists blame bacteria for some infertility

Some men have low fertility because of bacterial infections in their sperm, scientists have claimed.

The research suggests that a course of antibiotics may help to treat infertile men without the need for In Vitro Fertilisation (IVF) techniques.

Researchers from Hungary have shown that bacteria can prevent sperm from swimming well enough to reach an egg and fertilise it, New Scientist magazine reports.

Up to two thirds of men carry bacterial infections in their reproductive systems.

But in most cases the infections go unnoticed unless extremely large numbers of bacteria are present, in which case they can cause pain and discharge.

The Hungarian researchers isolated two types of bacterium, *Fusobacterium nucleatum* and *Bacteroides fragilis*, from 43 infected men, and tested their impact in different concentrations on sperm samples.

### Stopped swimming



Sperm usually swim in a culture medium for a day or more. But even in samples with low concentrations of the bacteria, only one per cent of the sperm were still moving after 18 hours.

In samples with the highest concentrations of bacteria - amounts found naturally in some men - all the sperm stopped moving after just three hours.

Dr Bela Molnar of Albert Szent-Gyorgyi Medical University in Szeged, said there were several possible reasons why the bacteria may impede the movement of sperm.

Antibiotics may be a cure

They might compete with the sperm for supplies of fructose, a sugar solution that sperm need for energy; they might produce a toxin that poisons the sperm, or they might physically interfere with the lashing of sperm tails.

Dr Molnar suggests that infertile men should undergo a treatment of antibiotics before IVF is considered. "We should first treat them and let the try to conceive the normal way," he said.

Professor Ian Craft, director of the London Fertility Centre, said he was thinking of introducing a course of antibiotics for all patients as standard procedure.

"A course of prophylactic antibiotics before assisted conception could help to prevent infection in some men. It could also solve any problem of sub-acute infection of the fallopian tubes in women," he said.

Professor Craft said antibiotics had not been given as standard because failure to fertilize an egg was "extremely rare" among men with good sperm counts.