



## Breakthrough technology in male infertility treatment

**L**ilavati hospital IVF centre, an ISO 9001 2000 certified unit, has recently launched an advanced microscope to visualise the chromosomes spindle during the ICSI procedure, which is the first-of-its-kind in India.

Padma Bhushan Dr Pushpa Bhargava, former director of CCMB Hyderabad, inaugurated the launch of the microscope. Lauding the Lilavati hospital infertility team, he said that he hopes that the new ICMR guidelines on infertility would be tabled and passed in the next session of parliament. On the occasion, Dr Narendra Trivedi, vice-president, Lilavati hospital, observed that the hospital has always been at the forefront in introducing the latest medical equipment and technology for the benefit of the patients.

According to Dr Hrishikesh, Pai, Gynaecologist, Lilavati hospital, "In over 50 per



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The new spindle view microscope

cent of the patients, males are usually responsible for infertility. In many males, the sperm count remains very low and pregnancy is not achieved. This then needs to be treated with Intra Cytoplasmic Sperm Injection (ICSI).

During the

ICSI procedure, the eggs are held in a particular way so as to not damage the chromosome spindle while inserting the injection needle into the egg. This is done by holding the polar body in a particular way, as one cannot actually see the location of the chromosome spindle," said Dr Nandita Paleshetkar, infertility specialist, Lilavati Hospital.

In a major breakthrough in optics and computational technology, this chromosome spindle can now be visualised in real time, while actually injecting the eggs. This would pro-

vent egg damage, increase fertilisation rates, increase embryo formation rates, better embryo quality and thus boost pregnancy rates. The machine called polscope makes use of optical deviation of light waves as it passes through the egg placed on a microscope. These deviations are then fed into a computer and based on the computer analysis, the spindle is located said Dr Nandita Paleshetkar. This machine can thus help in improving fertilisation rates and pregnancy outcomes said Dr Hrishikesh Pai.

"In Lilavati we are combining assisted laser hatching along with day five transfer called blastocyst culture to improve pregnancy rates to more than 80 per cent. This combination of treatments can be done in a two-step procedure called sequential transfer. The addition of the spindle viewing machine will further enhance this rate," Dr Nandita Paleshetkar added.

The IVF unit has also launched a web site [www.lilavatiindia.com](http://www.lilavatiindia.com) where infertile patients can avail a free consultation about their problems.