

OBSTETRICS AND GYNECOLOGY
IN PERSPECTIVE

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PRACTICAL
INFERTILITY
MANAGEMENT

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of ovarian stimulation and reduce the number of embryos transferred. These two factors clearly benefit the woman by reducing the risks of OHSS and multiple pregnancies.

Cloning

Cloning and related techniques add significantly to our medical knowledge. Transgenesis has produced sheep modified to produce human blood clotting factor IX in their milk.

While human cloning seems to be a popular subject for the media (there is even a website called 'Americans for cloning Elvis'), animal cloning projects are being improved. At present, animals have been cloned to produce human proteins like 1-antitrypsin, a promising agent for cystic fibrosis. Another way to benefit humans could be by producing *neutraceutical agents* that improve human health without treating specific illnesses, such as developing cow's milk devoid of antigenic properties for allergic children. A third potential area of interest is xeno-transplantation. Considering the lack of human donor organs, animal organs may be a good alternative, although at present rejection remains a major problem. Parkinson's disease and diabetes may also be targeted for cloning techniques. Scientists may be able to remove a single differentiated cell from a patient and, through nuclear transfer, produce undifferentiated cells. Through cloning techniques specific phenotypes may be produced that can be implanted in affected patients (Campbell 1998).

Although many applications of (animal) cloning are still only future prospects, the technique offers hope.

In Vitro Maturation of Human Oocytes

At all times of the cycle, growing preantral and antral follicles in various