

Baby from new ovary

■ BRITAIN

A STERILE woman is to give birth to the world's first baby conceived after a full ovary transplant.

The 38-year-old was rendered infertile when her ovaries failed at the age of 15, causing her to suffer an early menopause. After receiving an ovary transplanted from her twin sister, the woman, who lives in London, is expected to give birth this week.

The pioneering surgery will give hope not only to more than 100,000 British women who suffer an early menopause, but also to those undergoing chemotherapy or radiotherapy for cancer. They could now freeze an ovary before beginning the treatment.

The success also raises the possibility of women freezing ovarian tissue to postpone motherhood for social reasons, such as delaying marriage or not wishing to interrupt their careers.

After the ovary transplant, the previously sterile woman had periods for the first time in 22 years. In addition to the joy of becoming pregnant, the osteoporosis she had previously suffered showed signs of improvement as a result of restored hormone levels. The woman's twin, who already has two children, was prepared to sacrifice one of her ovaries to give her sister the chance of becoming a mother. The baby will, genetically, be the twin sister's child.

The transplant was carried out in America early last year by Dr Sherman Silber, the microsurgery pioneer of the Infertility Center of St Louis in Missouri.

Silber removed the ovary, which is the size of a walnut, from the donor twin using keyhole surgery. He implanted the ovary into the recipient and had to connect tiny blood vessels, one only a third of a millimetre in diameter, to establish blood flow to the organ.

Three months after the transplant the woman began to ovulate normally and her hormone levels were equal to those of her healthy twin after five months. The woman discovered she was pregnant about a year after the transplant.

Gynaecologists have already carried out transplants of strips of ovarian tissue, resulting in at least three births. This is the first known pregnancy from a whole ovary transplant, though a series of the transplants has been carried out by Silber. Transplants of pieces of ovarian tissue last for three years. Silber believes a whole ovary could last for up to a decade. Agencies