

their incidence of low lying placenta in early pregnancy was apparently reduced to only 2.6%. However, the situation can be resolved more quickly by the use of a vaginal ultrasound probe in a patient with the empty bladder. This has been shown not only to be a safe procedure but have also been found to be superior to the trans-abdominal route yielding significantly improved the accuracy of the diagnosis of placenta praevia. Indeed, Lauria *et al* were able to identify with 100% sensitivity and 85% specificity patients who are at risk of placenta praevia at delivery using the transvaginal scan in the second trimester<sup>4</sup>.

Placenta praevia rarely, if ever, presents as a catastrophic haemorrhage in the first instance. The value of finding a low lying placenta is therefore questionable as in the majority of cases a normal vaginal delivery is the outcome.

P Chia, MRCOG, K L Liu, MRCOG, E Versi  
FRCOG, Royal London Hospitals Trust, Whitechapel,  
London E1 1BB, United Kingdom.

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## Pregnancies and Births after Ovarian Stimulation with Recombinant Human Follicle Stimulating Hormone

Sir,

Assisted reproductive technologies such as in-vitro fertilisation (IVF), gamete intra-fallopian transfer (GIFT) and intracytoplasmic sperm injection (ICSI) require ovarian stimulation to increase the number of female gametes. The standard stimulation regimes involve the use of human menopausal gonadotrophins (HMG) or urinary follicle stimulating hormone (uFSH). The manufacture of these products from the urine has its disadvantages such as cumbersome collection, poor source control, low purity, low specific activity and some luteinising hormone (LH) contamination. Recombinant follicle stimulating hormone (recFSH), nearly 100% pure, without LH contamination has been suggested as a better option for ovulation induction<sup>1</sup>. We present the first reported pregnancies and births with the use of recFSH (Puregon, Organon International) in Malaysia. As the drug is yet to be registered, special permission was obtained from the Pharmacy Division of the Ministry of Health, Malaysia for the use of the drug.

Four patients with different infertility factors were stimulated with recFSH after downregulation with gonadotrophin releasing hormone analogue. One patient with unexplained infertility had intrauterine insemination of "washed" spermatozoa, one had the IVF procedure for tubal pathology while the other two were subjected to ICSI of their oocytes due to severe oligoasthenozoospermia in their male partners. A total of seven pregnancies - three singletons and one set of quadruplets resulted from the fertility procedures. Paediatric examination of the babies at birth did not reveal any abnormality. Overall, the treatment was well tolerated and no adverse effects were noted.

The first reported case of pregnancy and birth after ovarian stimulation with recFSH was in 1993<sup>2</sup>. Studies using recFSH in recent years have suggested a better

efficacy profile than uFSH where more oocytes were retrieved and high quality embryos were obtained<sup>1,3</sup>. The ongoing pregnancy rates including frozen - thawed embryo replacements using recFSH were also reported to be higher than uFSH, possibly due to better quality embryos after recFSH treatment<sup>1</sup>. While still speculative, possible reasons include the content of the more basic isohormone in recFSH, differences in pharmaceutical formulations and the presence of FSH inhibiting substances in uFSH. The duration of treatment and the total dose of recFSH administered were also significantly less in the various studies<sup>1,3</sup>. The added ability to use this drug subcutaneously may offer significant advantages for both patients and staff in terms of convenience and work load.

S P Rachagan, FRCOG, C K Fong, FRCOG,  
H Haris, FRCOG, Subang Jaya Medical Centre,  
Subang Jaya, Selangor, Malaysia

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