

tion acceptance rate of 80% plus, which will vastly reduce the eminently preventable complications of this condition. Increased public awareness in Ireland has been associated with a fivefold increase in vaccine uptake,³ though there is still a long way to go.

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¹ Miller CL. *Br Med J* 1978;i:1253.

² Gill DG, Ryan C. *Irish Med J* 1981;74:79.

³ Sze-tho R, Gill DG. *Irish Med J* (in press).

Ethics and in-vitro fertilisation

SIR,—It is of the utmost importance, as you suggest in your leading article by Professor Priscilla Kincaid Smith (1 May, p 1287), that the ethics of in-vitro fertilisation should receive very careful scrutiny. It appears strange that at a time when we deliberately abort about 290 000 naturally conceived children each year we should be striving for extracorporeal fertilisation and devoting much research and money to this endeavour.

Tremendous power is exerted by one person over another in this procedure, and this power is capable of abuse—either by individuals or by the State. The ovum fertilised in vitro (in a man-made ectopic environment) is judged by purely scientific criteria as to whether it is suitable for intrauterine transplantation. A number of such human "specimens" are rejected and allowed to perish, a procedure which amounts to extra-uterine abortion.

In addition, there is the possibility of unwittingly causing damage to the child, mentally or physically, either now or in the future. Whenever the natural order of things is violated we are on dangerous ground. I would urge that medical science should not feel impelled to do all that it is capable of doing, however invigorating the experience may be, but should act with caution and restraint. There is often too much enthusiasm for what is novel.

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SIR,—Professor Priscilla Kincaid Smith is in error when she attributes Roman Catholic opposition to in-vitro fertilisation to dogma and theology (1 May, p 1287). The basis for objection lies in the realm of natural law, which is not, as is commonly assumed, synonymous with "the law of nature" as commonly expressed but rather with moral law that can be deduced by reason alone without revelation, and therefore without specific reference to dogma and theology. The principal exponent of this view was St Thomas Aquinas, who in turn had drawn heavily on classical Greek ethics. His teachings are commonly referred to in modern times in connection with new moral dilemmas produced by contemporary technical developments.

The quotation of Pius XII referred to must be related to the time and circumstances when it was made. He was referring 20 years ago to experiments in human in-vitro fertilisation unrelated to successful live births. If an established technique for the fertilisation of a woman's oocyte by sperm from her husband can result in her having a successful live birth

in the majority of cases, then a new situation has been created and will no doubt be considered from the moral viewpoint.

On the other hand, many of the possibilities which this technique make possible are clearly immoral. The technique may be morally neutral in terms of natural law, but the purpose for which it is used calls for moral consideration. Hybrid human/animal fertilisation, for example, would be clearly against this natural law.

The in-vitro fertilised egg in natural law (and biology) is in the same category of being as a normally fertilised conceptus of the same age, and before it is frozen, cloned, or merely consigned to the sink one has to think what exactly it is. It is here that natural law, and, many would say, only natural law, could help us not to abuse this crucial new development.

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Heartburn in pregnancy

SIR,—While we would agree with Mr J G Feeny (17 April, p 1138) that in the majority of patients heartburn in pregnancy tends to be mild and responds to simple measures, we would remind obstetricians that such reflux oesophagitis in pregnancy can lead to oesophageal stricture.^{1,2} In patients with intractable heartburn endoscopy, which has been shown to be a safe procedure in pregnancy,³ should be considered.

We would dispute also the comment that cimetidine should not be used in pregnancy, since it has been shown⁴ that cimetidine has no effect on the fetus in labour, and, although studies in early pregnancy have not been carried out in the human, cimetidine has not been found to be teratogenic in animals. Furthermore, in view of its efficacy we would suggest that further studies are indicated before it is rejected for use in pregnancy heartburn.

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¹ Palmer ED. *Clinical gastroenterology*. New York: Paul B Hoeber Inc, 1957:611-4.

² Swinhoe JR. *Br J Obstet Gynaecol* 1981;88:1249-51.

³ Palmer ED. *Am J Med Sci* 1961;223:242-8.

⁴ McGowan NAN. *J R Soc Med* 1979;72:702-4.

Pharmacological treatment for intractable sneezing

SIR,—I was interested in the report by Dr K Davison (17 April, p 1163) of a lady with intractable sneezing. Having recently treated and apparently cured a sneezing patient I append her case history.

This was a normally healthy girl of 10½ years, who when I first saw her had been sneezing constantly for the previous four days. There were no apparent precipitating factors, and no abnormality was to be found on examination apart from sneezing. I prescribed nasal beclomethasone, and when I saw her again three days later was told she had continued to sneeze a thousand times a day. I prescribed chlorphenamine tablets, which were equally ineffective. She was kindly seen urgently at my request by an ENT consultant, who likewise could find no abnormality and

thought it must be psychological. She continued to sneeze constantly during the next 10 days. Interestingly she did not sneeze at night. I prescribed 2 mg of Valium thrice daily, which she took for two days at the end of which time the sneezing had stopped. Her mother reduced the tablets to 1 mg twice a day for a further two days followed up by 1 mg at night for a further three days. I am glad to say she has not sneezed since.

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Pregnancy complicated by psittacosis acquired from sheep

SIR,—Dr R J S Beer and others (17 April, p 1156) rightly draw attention to the need to know whether or not the widespread occurrence of *Chlamydia psittaci* (ewe abortion) infections in sheep in this country, with extensive contamination of farm sheds and equipment, might constitute a special infective risk to pregnant country women. At present there is little evidence that this sheep infection results in even respiratory or ocular infection of farmers or veterinary surgeons, in contrast with *C psittaci* infections of birds.

The authors make a firm recommendation that early delivery (in their case 1 by elective caesarean section) should be the treatment of choice in suspected infection of pregnant women with ewe abortion agent. These manoeuvres entail a distinct risk to both mother and child, so it seems essential that the suspicion of this infection must be based on stringent criteria.

The clinical findings in case 2 cannot be taken in support of the diagnosis in case 1 since no evidence was available to show that she had in fact contracted chlamydial infection from her sheep or, indeed, that her flock was suffering from chlamydial disease. In case 1 no chlamydia were isolated from the genital tract of the patient, and there is no report of either macroscopical, microscopical, or microbiological examination of her placenta, which might have helped to confirm the diagnosis, which was based solely on signs of a severe infection without apparent bacteriological (or virological?) cause accompanied by a rise in titre of serum antibody to *C psittaci*. Ewe abortion strains of *C psittaci* are the usual source of antigen in routine "Psittacosis-LGV" complement fixation tests, but they detect immune responses only against the group antigen shared by all serotypes of *C psittaci* and of *C trachomatis*. The indirect immunofluorescence test will also detect group-reactive antibody and thus does not prove specific infection by ewe abortion agent. Group antibody may result from clinical or inapparent infection with avian strains of *C psittaci*, which is frequent in workers handling poultry flocks (where infection is common) but which has not been incriminated as a source of human genital tract infections or risk to pregnancy. Once such antibody has been acquired there may possibly be anamnestic rises in titre in later unrelated illnesses.

Much more important, however, is that sexually-transmitted genital tract infections with *C trachomatis* are common in women throughout Britain, and presumably farmers' wives are not exceptional. In our experience high titres of group-reactive antibody detected by microimmunofluorescence tests¹ are a common accompaniment or persistent sequel of such infection. Moreover, we have found that pregnant women with cervical infection with *C trachomatis* may rapidly develop high rising titres of group antibody detectable in the "Psittacosis-LGV" complement fixation test early in the postpartum period.

In any severe febrile illness in pregnancy it may, of course, be necessary to consider premature delivery on entirely clinical grounds, with the danger of these procedures to the mother