The prognosis of the disease appears to be more accurately indicated by the intensity with which *Helix pomatia* lectin binds to primary breast cancer cells than by lymph node involvement. This binding reflects expression of N-acetyl-galactosaminyl glycoconjugates in the cancer cells. There may be many different glycoconjugates but it would be interesting to know whether CA 50 contains N-acetyl-galactosamine.

Professor Holmgren's group suggests that formation of new abnormal carbohydrate structures may be caused by activation of normally unexpressed glycosyltransferases. The observed changes, however, could be due to increased levels of normal glycosyltransferases. We raised an antibody to sialytransferase isolated from human milk, and found a tendency for primary breast cancer with a poor prognosis to show greater binding of this antibody than cancer with a good prognosis. This finding is also of interest because increased sialic acid concentrations have been implicated in increased metastatic potential.[2]

TIMOTHY EISEN
A LEATHEM

Bland-Sutton Institute of Pathology,
Middlesex Hospital Medical School,
London W1P 7PN

[1] Leathem AJC, Atkins NJ. Lectin binding to paraffin in sections. In: *Immunocytochemistry 2*. New York: Academic Press, 1983:39-70.
[2] Fogel M, Altevogt P, Schirrmacher V. Metastatic potential severely altered by changes in tumour cell adhesiveness and cell-surface sialylation. *J Exp Med* 1983;**157**:371-6.

Outcome of pregnancies associated with raised serum and normal amniotic fluid α fetoprotein concentrations

SIR,—Dr J Evans and Dr I M Stokes studied the outcome of pregnancies where serum α fetoprotein concentrations were raised with normal concentrations in the amniotic fluid (19 May, p 1494). In April 1983 we conducted a retrospective study of the same problem under the supervision of Dr J Scrimgeour and Dr M Johnstone.

Between July 1981 and March 1983 49 pregnancies showed raised serum α fetoprotein concentrations with normal liquor in the middle trimester. Two of these ended in stillbirth and one in spontaneous abortion. The remaining 46 were compared with 100 controls (the first 10 births with normal serum α fetoprotein concentrations every month for 10 months starting in July 1981). Raised α fetoprotein concentration was defined as greater than twice the median for Edinburgh. The controls did not have amniocentesis.

Like Dr Evans and Dr Stokes, we found an increased number of preterm deliveries and a significantly reduced mean birth weight ($p<0.001$) even in the pregnancies which went to term. The mean duration of pregnancy was significantly less ($p<0.001$) and there was a significant increase in the number of assisted deliveries. These were for a variety of reasons, with no recurrent pattern emerging. We also confirm the finding of a higher frequency of abnormality, five in the raised α fetoprotein group compared with one control. The abnormalities in the α fetoprotein group were (*a*) ventricular septal defect with prolonged QT syndrome (which led to neonatal death), (*b*) congenital hip dislocation, (*c*) cleft lip and palate, (*d*) fissure in ano, and (*e*) two vessel cord (normal fetus). In the control group the abnormality was bilateral hydrocoeles.

We support the view that the finding of a raised serum α fetoprotein concentration in the middle trimester followed by a normal amniocentesis is an indicator of an "at risk" group. Such cases are now carefully monitored in the Western General Hospital.

IAN CORRY
D WHYLER

Western General Hospital,
Edinburgh EH4 2XU

How large is the problem of medical negligence?

SIR,—Dr A Simanowitz (12 May, p 1460) cites a confidential inquiry that refers not to negligence in a legal or moral sense but to the fact that in a small population of infant deaths adverse factors in medical care may have contributed. This retrospective judgment involves the kind of audit that all responsible doctors must make about their conduct in cases that have an unsatisfactory outcome. A non-defensive examination of what was done in the light of all the evidence is how we learn. To sue a doctor in these circumstances, which seldom involve carelessness, ignorance, or neglect, is like shooting or sacking every military commander who in the midst of battle makes what is judged by historians or his political masters as a costly error.

Medicine demands higher standards from its practitioners than we ordinarily expect of ourselves and such standards, including the painful but necessary exercise of self criticism, can only be eroded by attacks on our alleged complacency. For genuine lapses recourse to the law is available, and in such cases sympathy is seldom on the side of the doctor in his lonely and taxing task of trying to make life and death decisions based on inadequate evidence and with little time or opportunity for reflection.

JOHN DAVIS

Addenbrooke's Hospital,
Cambridge CB2 2QQ

In vitro fertilisation

SIR,—The statement by the Reverend Professor G Dunstan at the BMA scientific meeting in Cambridge (28 April, p 1296) that: "Experiments on human embryos are justified" is the logical result of the introduction of in vitro fertilisation programmes. It was stated categorically at the start of the various programmes that embryos would never be used for research projects. It is now quite clear that if, as I do, you consider the act of freezing an embryo itself to be research then many embryos created through in vitro fertilisation are being used for research and not for the "treatment of infertility," which we were told originally was the only purpose.

Once it became known that more embryos were being created than could ever be implanted, it was obvious that "spare" embryos would be used for other purposes, even "the pursuit of improved methods of contraception." What has been lacking is the ethical justification for the experimentation, which Professor Dunstan informs us "must cease before the neural equipment has been formed because this is the moment of sentience." The Institute of Biophysics in Pisa, however, holds an opposite view. It intends to hold a seminar later this year entitled "Sensory perception and transduction in aneural organisms." Everyone, including Professor Dunstan, agrees that the embryo is an aneural organism in the scientific sense, and current thinking about its sensory status will enlighten us all with regard to research on embryos.

Despite Mr Patrick Steptoe's assurance that all his work "was subject to stringent control and approval by the Bourn Hall ethical committee and the Royal College of Obstetricians and Gynaecologists," I suggest that the only real control lies in the Medical Declaration of Geneva 1948, which asks all doctors to "Maintain the utmost respect for human life from the time of its conception."

PATRICK W GILL

Neath General Hospital,
Neath,
Glamorgan SA11 2LQ

Psychosis after cannabis abuse

SIR,—The implication in the first paragraph of the letter from Dr P Carney and Dr M Lipsedge that cannabis psychosis is not well recognised is answered by the letter by Dr M G Brook (5 May, p 1381), which reinforces our own observations concerning its incidence and psychiatric manifestations. From Kraepelin onwards psychiatrists have recognised that clinical description must precede attempts at defining aetiology. Our study was prompted by a lack of such description in published reports in the United Kingdom.

There is a contradiction implicit in the letter from Dr Carney and Dr Lipsedge. Having apparently denied the existence of cannabis psychosis as an entity they then tell us how they are investigating it. Few would agree with them that a single aetiology can have only one clinical manifestation. This is as patently absurd as saying that there can be only one aetiology for a given syndrome.

We innocently wonder if the absence of references to cannabis psychosis in British medical journals is due to the activities of those who want the use of cannabis legalised and who assert that cannabis is harmless and therefore ill effects cannot be attributed to it—ever. If so it is time that *all* the evidence comes to light and that this assumption can be critically re-examined.

M W P CARNEY
LORENZO BACELLE

Northwick Park Hospital and Clinical Research Centre,
Harrow,
Middlesex HA1 3UJ

BRIAN ROBINSON

Shenley Hospital,
nr St Albans,
Herts

Correction

Late mortality after vagotomy and drainage for duodenal ulcer

We regret that an error occurred in the letter by Dr N J Bundred and others (2 June, p 1692). Paragraph three, line one should have read: "Bile salts have a promoting effect on colorectal carcinoma. . . ." The address for R J Prescott is the University Department of Medical Computing and Statistics, Royal Infirmary, Edinburgh EH3 9YW.