Maternal and fetal screening

SIR,—We wish to comment on the suggestion by Dr M J V Bull that a comprehensive serum TORCH screen (toxoplasmosis, rubella, cytomegalovirus, herpes virus) may be appropriate before conception.[1] Dr Bull did not discuss the circumstances in which this might be appropriate or explore the implications of screening for these conditions before conception. The acronym may be a helpful aide memoire for a paediatrician faced with a sick neonate but is probably less useful to a general practitioner giving advice to a healthy woman.

Checking rubella antibody state before conception is desirable because those who are negative may be immunised and those who are positive may be reassured. The action to be taken in the light of the test result is clear, the possible benefits are considerable, and the risks are limited largely to the possibility of inappropriate reassurance to women who have false positive tests.

A test for antibodies to toxoplasmosis before conception is less easy to justify. Approximately 80% of women of childbearing age in the United Kingdom lack evidence of past infection with toxoplasmosis.[2] If the intention is to identify these women and advise them about ways of avoiding the infection extending the health education advice (which is not particularly restrictive) to all women would be a more efficient use of resources and would also protect those women who have false positive results of the screening test.

It is not clear what action should be taken or advice given after a preconception test for cytomegalovirus. About half the women who have the test will be told that they are susceptible to the virus and that there is no vaccine. Sexual transmission is well documented but the risks associated with close contact with babies and young children, much debated, are unknown—there is no consensus on specific advice about avoiding cytomegalovirus infection.[3] Fetal damage may occasionally follow reactivation of infection in pregnancy, as well as primary infection,[4] and thus reassurance for a woman with a positive test result may be inappropriate.

Screening for herpes virus is also complicated. Although primary infection in pregnancy is the main cause of fetal damage, serious damage may also follow recurrent infection. Probably only a few women who have had genital herpes will have had symptoms that led to diagnosis. Serological tests discriminating between antibodies to herpes simplex virus types 1 and 2 are not yet available routinely—even if they were a growing proportion of genital infections is now associated with type 1.[5] Only about 10% of women have no antibodies to herpes simplex viruses but probably 90% have not

had genital herpes and are thus at risk of a primary infection in pregnancy.[6] What useful advice or reassurance can be given on the basis of knowing a woman's antibody state?

Doctors should not refuse to test women who are concerned about particular infections. Nevertheless, the implications of any test, including difficulties in interpretation, must be discussed beforehand. But screening is not an appropriate description of tests undertaken in these circumstances—screening is a service offered routinely to all women in which the advantages of testing are not outweighed by the disadvantages. It is unreasonable to offer screening tests for conditions simply because the tests are available, and it is extremely unwise to pursue the piecemeal introduction of screening tests before proper evaluation using recognised criteria.[7]

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