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Commentary

Maternal mortality from heart disease in pregnancy

Heart disease is now the third commonest cause of maternal mortality in the United Kingdom, after hypertension and thromboembolism. The data of the Report on Confidential Enquiries into Maternal Deaths in the United Kingdom 1985 to 1987¹ show that the number of deaths has been constant (23 deaths between 1985 and 1987, about 1 per 100 000 births) since 1973. During this time deaths from other causes such as anaesthesia and haemorrhage have become less common, making cardiac disease relatively more important. Between 1973 and 1987, the number of cardiac deaths from congenital heart disease has doubled whereas the number of deaths from acquired heart disease has halved.

Of the 10 patients who died of congenital heart disease, three had endocarditis (not contracted in labour) which was a major feature of their terminal illness and the remainder had pulmonary hypertension, either Eisenmengers' syndrome (four cases) or "primary" pulmonary hypertension (three cases). In the patients with acquired heart disease nine died from coronary artery disease, two had endocarditis, one had "myocarditis", and the other had cardiomyopathy (probably puerperal).

What lessons can be learned from these figures? The patients who died from coronary artery disease were often older, smokers, and might have died whether or not they were pregnant. As contributing factors to cardiac mortality the authors of the series of confidential enquiries cited the failure of patients to comply with doctors' advice, the failure of patients to be seen regularly in joint consultation between physicians and obstetricians and the general failure of cooperation between obstetricians, cardiologists, and anaesthetists. We should not become complacent and lose sight of these problems.

But pulmonary hypertension remains the major maternal risk. Even if the patients are treated with full coopera-

tion between experts, we do not know how best to manage pulmonary hypertension in pregnancy apart from advising patients not to become pregnant or urging termination. On the other hand, unless patients with pulmonary hypertension are seen in specialist clinics there will be no advances in management. The ability to induce selective pulmonary artery vasodilatation would be particularly valuable in pregnancy.

Physicians need to be particularly vigilant about endocarditis in pregnancy. Perhaps the immunosuppression that allows survival of the fetal homograft and increases the risk of viral illness also increases susceptibility to endocarditis.

Finally, there is insufficient awareness of the condition of puerperal cardiomyopathy among non-cardiologists (obstetricians and general practitioners) treating women in pregnancy. Any patient presenting with breathlessness at the end of pregnancy must be adequately evaluated. The chest x-ray is the screening investigation that is usually omitted because of groundless fears of the radiation hazard to the fetus. Most, though not all, patients with puerperal cardiomyopathy have a cardiac silhouette that is enlarged even by pregnancy standards and that would prompt further investigation by echocardiography. When puerperal cardiomyopathy presents antenatally the patient should be delivered and treated with anticoagulants because of the risk of thromboembolism. Without heart transplantation, however, a third of these patients will die.

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¹ Department of Health and Social Security Report on Confidential Enquiries into Maternal Deaths in England and Wales, 1985-1987. HMSO, 1991.