Near fatal puerperal thrombosis on Björk-Shiley mitral valve prosthesis

Sir,

We agree with McLeod *et al.* (*British Heart Journal*, 1978, **40**, 934-937) that biological valves should remain the prosthesis of choice in young women. We are intrigued by their decision to change to heparin at 17 weeks; the change should be made earlier to ensure against fetal malformation. However, the circumstances in this case presenting at 10 weeks' gestation may have placed the authors in a difficult clinical situation. There is no doubt that a small number of patients with prosthetic heart valves develop occlusive thrombosis of the valve in spite of adequate anticoagulation; the risk is even greater during pregnancy. While agreeing with the conventional concept of heparin in early pregnancy, this patient could have been switched to warfarin in the second trimester and back to heparin before labour. In addition, especially with a mitral disc valve, an antiplatelet drug like dipyridamole in a dose of 300 to 400 mg/day may be a necessary safeguard. This drug does not increase the risk of bleeding at this dose and can only complement the action of subcutaneous heparin. This has been our practical approach to the problem. Though subcutaneous heparin may be an acceptable form of prophylaxis in venous thrombosis, it may not afford adequate protection in the dose and route used in the prevention of thrombosis in the arterial circulation.

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This letter was shown to the authors who reply as follows:

Sir,

We are interested in the practical approach by the Leeds group to the problem of managing heart valve prostheses in pregnancy. We agree that the addition of dipyridamole seems a sensible plan since there is some objective evidence of its efficacy when added to conventional warfarin therapy. However, there is only anecdotal evidence of its efficacy as a sole protective agent in this situation.

The patient discussed in our paper was, we agree, changed to heparin at too late a date in pregnancy to protect fully against fetal malformation. Unfortunately this matter was out of our hands. Obviously the ideal would be to use heparin prospectively in patients who are planning a pregnancy, and we await the results of further studies of antiplatelet drugs with interest.

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