

The authors may mean that a single cardiac tumor may be benign and unassociated with tuberose sclerosis or that tumors may be cardiologically benign because most tumors regressed spontaneously or did not require treatment, but they do not say that. Their conclusion is therefore misleading and inappropriate.

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References

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Reply

With regard to the letter by Allan concerning the conclusions of our report (1), I do not feel that our conclusions are misleading or inappropriate; rather, Allan has simply misinterpreted our intended context of the word "benign."

This large, retrospective, multicenter study was intended to provide epidemiologic information about the diagnosis and management of fetal cardiac tumors. Given the retrospective nature of the study, it is not surprising, Allan notes, that some data were not available for each case. Despite these limitations, which were addressed in the discussion, the proportion of fetal patients with tuberous sclerosis and fetal tumors was similar to that reported in other pediatric studies (50%).

The term "benign" was used twice in our report, once in the abstract and once in the discussion. In the abstract, the context of the word "benign" refers to tissue type of tumors. Of 19 tumors discovered, 17 were rhabdomyomas, a benign tumor. The other two tumors were not benign—a fibroma that infiltrated throughout much of the heart and an atrial hemangioma. In this context, "benign" is neither misleading nor inappropriate.

In the discussion, "benign" does indeed, and was intended to, refer to outcome. I have no problem in stating that fetal cardiac tumors "can behave in a benign fashion." Not all tumors required intervention; some tumors spontaneously involuted; and not all patients with tumors had tuberous sclerosis (as in Allan's personal experience). In fact, as Allan notes, our data suggest that single tumors are rarely associated with tuberous sclerosis; a finding different from that reported previously (2). This point is further clarified in the final sentence of the report, which states "therefore, counseling of families where single cardiac rhabdomyoma is present may be more optimistic."

I am all too concerned that physicians performing fetal echocardiography are counseling families on the basis of an incomplete knowledge base that is still present in the published reports. This point was previously made in an editorial by Huhta (3). Our multicenter study also highlights the importance of completing our knowledge base of fetal diseases before recommending therapies as significant as fetal surgery or termination of pregnancy. There is no doubt that tuberous sclerosis can have a devastating effect on children and their families, but the termination of a pregnancy because of a child with a single

cardiac tumor who may not develop tuberous sclerosis is an equally significant event.

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Assessing the Significance of Preinfarction Angina

The report by Anzai et al. (1) in a recent issue of the Journal concluded that patients with preinfarction angina pectoris have a more favorable short- and long-term prognosis after hospital admission for acute myocardial infarction. This is in contrast to previous studies examining the issue, which have found that patients with a history of angina actually have a worse short- and long-term prognosis after a myocardial infarction (2-5). As pointed out in the report by Anzai et al., the majority of previous studies did not control for confounding variables, such as prior myocardial infarction, severity of coronary disease, signs of heart failure and infarction location. In an attempt to overcome these limitations, Anzai et al. (1) limited their study population to patients without a history of prior infarction and controlled for numerous confounding variables. The authors concluded that 1) preinfarction angina is an independent predictor of decreased in-hospital mortality, and 2) in patients with an acute anterior infarction, preinfarction angina is associated with a lower incidence of cardiac rupture, ventricular aneurysm formation and readmission for heart failure. They hypothesized that the beneficial effect of preinfarction angina occurred from infarct size limitation possibly secondary to ischemic preconditioning (1).

Although the patients with and those without a history of angina appeared to be well matched with respect to age, gender and cardiac risk factors, an alternative explanation for the beneficial effects of angina observed in this study is that preinfarction angina is a marker for a confounding factor that was not measured, such as aspirin use. The investigators controlled for numerous medications, including the use of thrombolytic therapy, beta-adrenergic blocking agents, calcium antagonists and angiotensin-converting enzyme inhibitors but surprisingly failed to control for aspirin use. It is quite plausible that patients who developed angina before their first myocardial infarction were more likely to be taking aspirin.

In a recent study, Garcia-Dorado et al. (6) prospectively evaluated the effect of previous aspirin use in patients presenting with acute ischemic syndromes. They found that previous aspirin use was associated with a shift toward a less severe clinical course and that in the subset of patients who developed a myocardial infarction, prior aspirin use was associated with a 38% reduction in peak creatine kinase (CK)