

(2%) in all hypoperfused segments (n = 87). These 2 segments were in ischemic but noninfarcted, remote, myocardium. Thus, even the number of segments with relatively increased fatty acid uptake was less in our study compared with the study of Schulz et al. (2), using their threshold, instead of more, which is the major point raised by Buell et al.

Another major resemblance between both studies is the finding that a higher correlation was found between fatty acid uptake and perfusion: $BMIPP(\%) = 0.75 * Tl(\%) + 23$, $r = 0.87$ and $n = 273$, than FDG versus perfusion: $FDG(\%) = 0.70 * Tl(\%) + 24$, $r = 0.75$ and $n = 273$.

In addition to the differences in methods pointed out by Buell et al. (vide supra), the following differences in study design should be mentioned: the myocardial segments in our study were 13 in each heart versus 33 in the study of Schulz et al. (2). Furthermore, we used a reference database of healthy individuals to define normal or abnormal perfusion by ^{201}Tl (1), whereas Schulz et al. (2) did not use a normal reference database but defined hypoperfusion by ^{99m}Tc -hexakis-isobutyl isonitrite (MIBI) uptake $<70\%$ of peak uptake. Finally, they used an oral glucose load before FDG imaging, which results in lower target-to-background ratio compared with the glucose clamp or Acipimox (Byk, The Netherlands) protocol, as we applied it (5,6). By coincidence, both study groups consisted of only 21 patients, and therefore one may not be surprised that the relative numbers are not exactly the same. Still, the principle finding is the same.

The protocol we used has been proven to discriminate viable from nonviable myocardial segments, hence, satisfactorily predicting functional outcome after revascularization (7,8). Furthermore, it has been demonstrated in our institution that there is good agreement between the detection of viability in dyssynergic myocardium with $FDG/^{13}N$ -ammonia PET and $FDG/^{201}Tl$ SPECT (9). Therefore, we feel that their suggestion that our results may be influenced by the study design is incorrect. Obviously, the outcomes of both studies are to some extent influenced by study design and evaluation methods.

Our study did not contain patients with a left bundle branch block (LBBB), so we cannot comment on the issue of LBBB and substrate utilization.

Thus, the differences in methods, especially the threshold of a metabolism/perfusion difference to define a matched defect or mismatch, is largely responsible for the different numerical outcomes of both studies. Nevertheless, it is an important observation that the principle outcome is the same: increased fatty acid uptake relative to perfusion can be found in chronic ischemic myocardium.

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Moyamoya Disease and Pregnancy

TO THE EDITOR: I read with great interest the article by Kume et al. (1) reporting on the usefulness of cerebral blood flow (CBF) mapping under hyperventilation for prediction of the risk of vaginal delivery of pregnant women with moyamoya disease.

My colleagues and I have recently reviewed the literature describing pregnant women with moyamoya disease (2). In the literature, there have been 53 pregnant women with moyamoya disease: 30 patients (group A) who had been diagnosed with moyamoya disease before pregnancy and were capable of delivery, and 23 patients (group B) who were symptomatic and diagnosed for the first time as having moyamoya disease associated with pregnancy. In group A, delivery could be performed safely either by cesarean or vaginal delivery, and any anesthetic method could be used, as long as special attention was given to avoid hypocapnia, hypotension and hypertension. Poor prognosis for the mother or the neonate was generally caused by cerebral hemorrhage in group B and not by cerebral ischemia in group A. In fact, neither cerebral ischemia nor cerebral hemorrhage developed during delivery in patients in group A, although only 11 patients from the group had undergone extracranial-intracranial bypass surgery when diagnosed with moyamoya disease. As Kume et al. (1) stated, hyperventilation challenge may be dangerous for patients with moyamoya disease. Thus, CBF mapping under hyperventilation could be dangerous and may give little information on the safety of vaginal delivery for the patients in group A. Accordingly, I do not believe that evaluation of cerebral vascular reserve using ^{99m}Tc -hexamethyl propylenamine oxime (HMPAO) is necessary even if its radiation dose to the fetus is negligible. Instead, we should find the best method of delivery (vaginal or cesarean delivery) and anesthesia (general, epidural or spinal) which are familiar to the obstetric and anesthetic teams in each hospital to avoid hypocapnia (hyperventilation), hypotension and hypertension.

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