and an unspecified number [eight or less] in the Rey et al. [4] report, we hope that the addition of a description of our experience in this unique high risk population of newborns will be helpful to others who embark on the procedure.

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References

Prediction of Reocclusion After Coronary Thrombolysis

In a recent article, Veen et al. (1) demonstrate a reocclusion rate of ~30% at 3 months in a culprit vessel that was patent within 48 h of thrombolytic therapy. These results provide new and important information. Given the relatively high rate of reocclusion, as observed and discussed by the authors, I wondered whether additional information with respect to angiographic grading would shed more light. Reocclusion was defined as grade 5 (total occlusion) or grade 4 (91% to 99% diameter stenosis with incomplete vessel filling within three cycles), whereas grade 3 (same as grade 4 but with complete filling within three cycles) was considered indicative of patency. Thus, the assessment of patency is not only dependent on assessment of severity of the stenosis but also rate of filling within three cycles. Could the authors provide the results divided by grade 4 and then grade 5, rather than a sum of these two, and how many of the grade 3 stenoses at baseline became grade 4 at 3 months? This information would be of further help in separating the pathophysiology of culprit vessel reocclusion from the technical aspects of methodology.

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Reference

Reply

Langer wondered whether the reocclusion rate could have been influenced by technical difficulties in separating grade 3 from grade 4 stenosis. We agree that it can sometimes be difficult to separate grade 3 from grade 4 stenosis by visual assessment of flow (grade 3 defined as 91% to 99% stenosis with distal filling within three cardiac cycles and grade 4 defined as 91% to 99% stenosis with distal filling in more than three cardiac cycles). However, in the APRICOT (1) study we did not have great difficulties in making this separation because most grade 4 occlusions showed distal filling in more than five cardiac cycles. We found a grade 3 stenosis at first angiography in 72 patients. At the second angiography 28 stenoses were still grade 3; 5 progressed to grade 4; and 25 progressed to grade 5. Thus, of the 72 stenoses only 5 (6.9%) changed from grade 3 to grade 4. Of the 30 recurrences 5 (16.7%) were grade 4, and 25 (83.3%) were grade 5.

Thus, the largest part of the recurrences found in the group with grade 3 stenosis at first angiography had grade 4 stenosis at second angiography and thus clearly reoccluded. Furthermore, of the five recurrences having grade 4 stenosis, four showed distal filling in more than five cardiac cycles, making the separation from grade 3 stenosis quite easy. Therefore, it seems unlikely that the data on reocclusion were influenced by possible difficulties in separating grade 3 from grade 4 stenosis by visual assessment.

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