

March 3, 1975

Florence E. Mayer, M.D.

National Institute of Health
Clinical Cardiac Diseases Branch
Division of Heart & Vascular Disease
National Heart and Lung Institute
Bethesda, MD 20014

Dear Dr. Mayer:

After our recent telephone ^{conversation} conversation, I determined that the date of the award for Sudden Death related studies at this laboratory was actually 5/01/74 - 4/20/76. It would be more convenient for me to present our progress report by that date. This I will do unless you notify me that an earlier progress report would be of particular value to you in preparation of reports for your own division.

MM
In summary, I can say that the first year has been spent fruitfully in the descriptive epidemiology of ectopic heart rhythms in the several populations available, as described in the grant application. The results ^{have} been straightforward and we think useful and have been reported in abstract form at the 1974 meetings of the American College of Cardiology, in tentative form at the Sudden Death Conference at Spring Hill and are being reported in the Spring Hill publication due for a Circulation supplement in September 1975.

The work in very complete shape has to do with the prevalence of the various types of rhythms in a short monitoring strip acquired in total population samples of about 12,000 men in census tracts of the Twin Cities area, and associations of the ectopic rhythms with other measurable physical characteristics and health habits as well as with a computed coronary risk score. The results indicate no association of ectopic beats (VPB) with estimated coronary risk generally, in men free of CHD history or other ECG abnormalities.

Our explorations are also under way within other populations than MRFIT. It is found that the number of sudden death events, or the number of complicated forms of ectopic beats to be found in the resting or short post-exercise electrocardiogram despite the thousands of cases available to us, is limited and will provide only suggestive trends even with a 10 year follow-up. Within the next few months we will have completed all of these analyses, and ~~some~~ in time for the anniversary progress report.

It seems, as Larry Hinkle has said, that those of us who have many men and many years of follow-up have very few ectopic beats and events, in contrast to those who do long term monitoring and have loss of ectopic beats to analyze but very few men under very short term follow-up. We will do the best we can with the information at hand.

In addition, the Laboratory of Physiological Health has the longest follow-up experience available of exercise induced premature beats and we are systematically making analyses of these findings which should be reportable within the year.

The second major part of the Sudden Death related studies funded from the Clinical Cardiology section has to do with the intervention trial on ectopic beat frequency. The recruitment phase for this trial is largely completed, having identified 4.5% of 12,000 men who have ectopic activity in a short monitoring strip at peripheral community screening centers, near their homes, and representing something on the order of a 90% sample of the community for men ages 35 to 57.

We are at this time pretesting the induction tests and procedures for the more detailed measurement of ectopic activity and have begun to call in the primary screened men to determine the degree of replicability and potential for quantitative measurement for ectopic activity using precipitating tests. The latter involve dynamic and isometric exercise, breath-holding, vagal stimulation, cold press or exposure, and mental arithmetic stress.

The project ^{officer} ~~officer~~ is a full time post-doctoral fellow, Dr. Guy DeBacker from the University of Ghent in Belgium who has brought experience in cardiology, exercise physiology and from the "MRFIT Study" of Belgium with considerable epidemiological expertise. He is taking strong leadership in the program which is now at peak activity. The schedule is such that the intervention program now being pretested will be carried out through the late spring, summer and fall months of this year. Results will come sufficient that we may provide a complete report by the second anniversary date of the Grant Award. Conceivably they will be early enough for us to entertain an application for renewal for one more year of explorations and analyses generated from the project. Having myself, some awareness of the fate of the Sudden Death activities of the division, I wonder if you might give me an idea of the potential for consideration of a one year extension renewal, versus a reapplication if the results appear promising. I expect the idea would be to compare the efficacy of our hygienic intervention (if it proves beneficial), to a drug suppressive program for VPB in relatively short term experiments in coronary patients or those in which VPB ^{suppression} ~~suppression~~ by drugs is considered appropriate.

This represents a brief status report prior to the anniversary of the grant. You will receive a through annual report with data in May unless you notify me beforehand that you have reason to require such a report prior to that date.

Cordially yours,

Henry Blackburn, M.D.

VPB Study Group

Add section from MRFIT annual report

blind pc:

- ✓ Gramma
- ✓ Pinkerton (please forward)
- ✓ J. Cohn
- ✓ H. Russell