



VETERANS ADMINISTRATION

HOSPITAL

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Charles Berry, M.D.
Lyndon B. Johnson Space Center
NASA
Houston, Texas 77058

Dear Chuck:

Many thanks for inviting me to attend the meeting in Chicago on August 13. Your group is doing a most commendable job in a difficult area of investigation. Sometime I would appreciate receiving a copy of the ECG abnormalities observed in the post-flight exercise test on astronaut Weitz. His ECG clearly shows a run of ventricular rhythm and one short salvo of ventricular tachycardia with one "R on T" extrasystole in the salvo. If he were a patient of mine I would repeat a maximal exercise test to see if this is a repeatable phenomenon. If it occurred again it would be a clear indication that this is a serious problem than if it occurred only on one occasion. Whether or not it is reproducible I would not consider it wise for him to participate in any further missions. I would not urge him to have a coronary arteriogram but would explain to him that such an exercise response is usually observed only in subjects with significant coronary disease. If significant coronary disease is demonstrated by a coronary arteriogram he should follow a program designed to prevent progression of the disease. If he has a normal arteriogram his prognosis (long term) is probably good. The decision as to whether or not he should have an arteriogram should be made by him on the basis of the above information supplied to him.

I assume that a DC defibrillator is available - turned on and ready to go - during the sea level exercise tests. This is essential. It would also be advisable to have a battery powered portable unit available in Skylab with the crew instructed in its use since if ventricular tachycardia can occur at sea level (and this was the case although fortunately terminating spontaneously) it can occur in space. This is standard medical practice in any laboratory doing exercise tests or other tests that stress the circulation.

I will see what data I can get from people doing a large volume of maximal exercise tests to see how many "normal" subjects have salvos of V tachy during exercise and if such subjects have subsequently been shown to have coronary artery disease.

Best regards,

Herb

HERBERT N. HULTGREN, M.D.
Chief, Cardiology Service

cc. Dean Mason, M.D.
Show veteran's full name, VA file number, and social security number on all correspondence.