

ECG paper

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Dear Tavia:

I was impressed by the thoroughness and power of your arguments on Framingham "LVH." I didn't realize my aside would precipitate a broadside, but you have effectively shut me up--after this return salvo. First, it made me realize that my mention of it recently to Bill and to Manhy was partly from pique and annoyance. I guess I had thought that our arguments in an editorial review of the article for Circulation a couple of years ago would be immediately heeded; instead Bill has continued to talk around the country of the "LVH phenomenon." Second, it made me realize that having talked about it so much and now having it in the logistic, that what is done is done, and that there's nothing more to do about it. As Framingham goes, so goes the world and justly so.

But consider please the possible validity of some of my points, though clearly "second order questions":

You started out with a real wastebasket in the LVH criteria, including conduction defects and axis deviation, etc. To me and to others your wastebasket therefore contains some garbage. Moreover, LVH is not a universal diagnostic term; it means many things to many people. We, and now you, have evidence that the wastebasket has some stuff in it of prognostic import and some garbage. I would think your own finding that amplitudes were important in some and T waves in others would bother you about using the wastebasket. Why not try baldness in the criteria? Do you think the bad result with the T-C logistic using LVH, that Max mentioned, might have something to do with this? Different proportions of uninfluential garbage in the whole might be important. Don't your ~~own~~ findings on this bother you?

We, in men only, have dissected the ischemic ST configuration from the isolated negative T, from "hypertrophy" amplitudes and other ECG findings. We find that ST is the only consistent and strong variable. Consequently, we would like to talk in terms of an ischemic ST finding, rather than the loose, non-universal, and mixed bag "LVH." You have also not read ST findings independently of T, and this goes back ten years to Framingham's lack of interest in "objective" coding of the ECG. Nevermind that.

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With regard to the risk function I think I am aware that the present tables cannot be collapsed. I was suggesting to Manny that we consider putting together some other risk functions with fewer variables. To me the point is whether the tables are universal, as well as useful. Bill recently made a specific point of suggesting that we promulgate them for wide practical use. Manny and I concur in the idea and are engaged in finding some universals to recommend widely as a risk index.

Personally, I am not happy to recommend "LVH" as a "term" which has different meanings about the country, which emphasizes an anatomical diagnosis which may be largely irrelevant to the causal factors in death, and which is clearly a mixed criterion made up of factors highly related and others quite unrelated to mortality risk.

Obviously haven't impressed you or Bill with this argument. The only thing you can do now to make me happier is to publish your detailed breakdown of ECG factors adjusting for the effect of others, and consider yourself whether you still want to push this term and these criteria. I personally find a more logical approach would be a "continuous" grading of the type and degree of ST depression rather than the presence or absence of "LVH." On the other hand, I now recognize the fait accompli and am prepared to live with it grumblingly.

Thanks for your attentions. The enclosed is not the evidence I refer to about ST, but confirms the matter in infarct patients.

Regards,

Henry Blackburn, M.D.

HB/rs

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