

Views From the E-List* -- Cardiac Rehab

Query:

We are about to embark on a multi-year project that explores the effect of aquatic exercise on older adults- especially those over 80. We plan on using HR to measure intensity as the subjects work through a 12-week regimen. There are many contraindications for determining the correct target HR for immersion studies in water. Even more for older adults.

What protocols would you suggest for determining the target HR for an older adult that may have had hip replacement, 80+ year old, taking a beta-block. Any wonderful source to determine a THR for immersion (aquajogger) and shallow water (navel) exercises.

Responses:

You may want to consider RPE instead of (or in addition to) HR to measure intensity, especially given the changes in HR response for water exercise than land exercise, the age and potential for cardiac medications (or limit the study to no cardiac meds that affect HR), unless they have had/will have a max stress test.

There are a great many advantages to using RPE. The beauty of RPE as opposed to HR is that it is as close to medication-independent as any measure can be, and is essentially a real-time measure, not requiring someone to stop and take the HR, nor requiring a Polar monitor. How do you measure heart rate in someone with a chronic rhythm disturbance or someone with a peripheral neuropathy who cannot feel their pulse unless you use a Polar? There are many advantages for using RPE, and by teaching the group of subjects the concepts, you have really taught them a life skill that is very, very useful.

Borg perceived exertion chart for Aquatics

We now have waterproof paper and pens. You can run the paper through a laser printer to customize your fields. Also, we have a log book focused more on chemical parameters of the water. Sorry to be pitching our stuff, but you asked. <http://www.nspf.org/PoolLog.html>

I have used waterproof paper for years, finding the laminating process both expensive and inconvenient. There are papers for both laserjet and inkjet printers, but the laserjet ones are completely waterproof, whereas the inkjet ones require a fixative spray after printing to remain non-bleeding. It is easy to write with pencil on them, or with magic marker and they are very very hard to rip, although you can 3-hole punch them for a notebook. I last bought mine through Nalgene products although Graytex Papers <http://www.graytex.com/laser-ruff-n-tuff-paper.htm> makes several versions from water-resistant, which works fine, to totally waterproof. The former is about half the price, and they make a number of sizes, from 8.5 x 11, to tabloid 11 x 17". There are other sources as well, but Graytex seems to be the cheapest I've found.

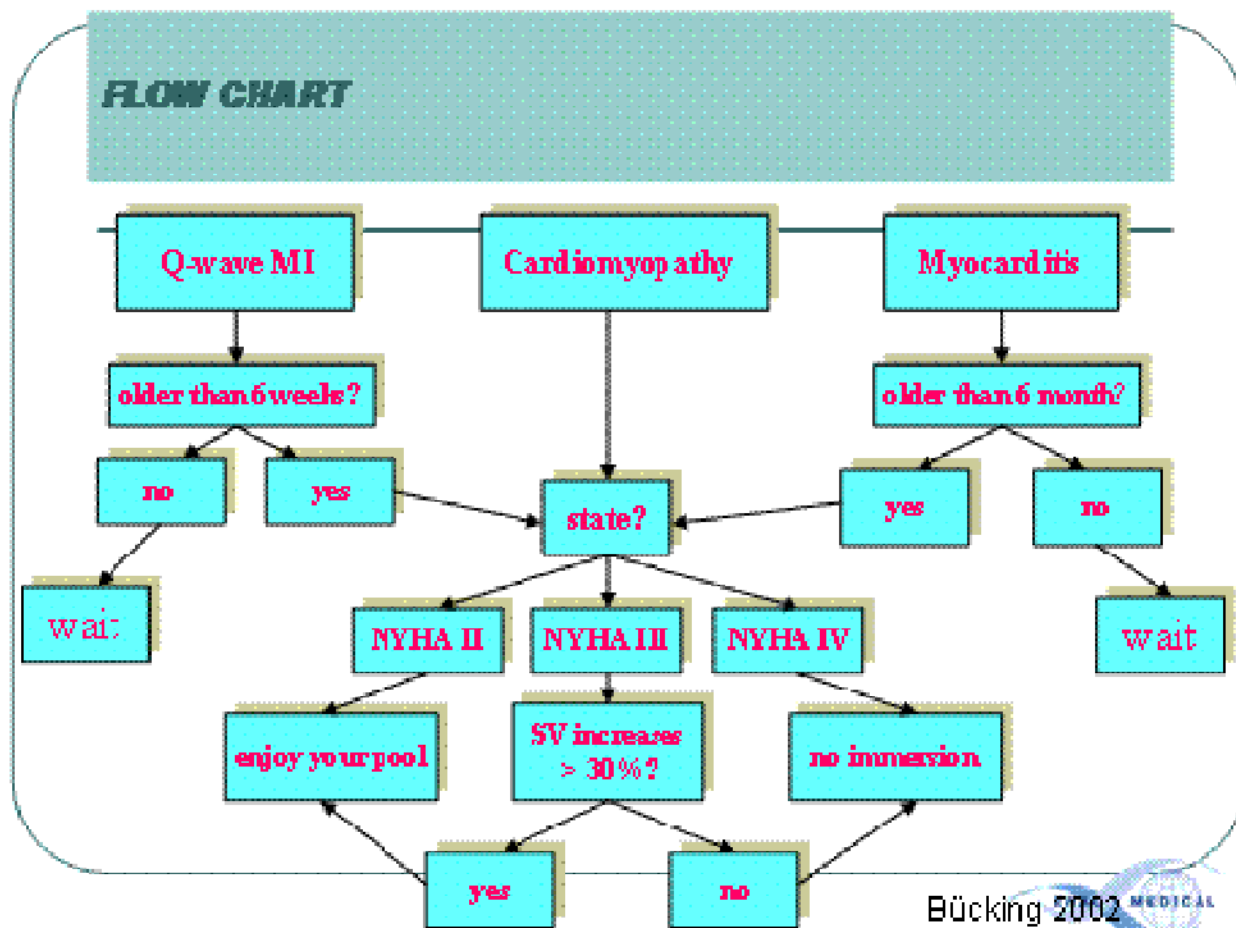
I missed your first message (size?type?), but found a company that specializes in all types of target heart rate charts for aerobic classes--2 sizes small laminated--11 x 17 @12.50 & large laminated (17x22) @ 16.50 w/ 8.50 UPS charge for total order.

Young Enterprises,INC-Leavenworth, KS www.youngposters.com, or 1-800-765-3975. Hope

that will help.

Some time ago there was a discussion about cardiac rehab in water. I only have time now to add this algorithm, proposed by the German cardiologist Bücking.

I guess it might add to some clinical decision making.



**Opinions and suggestions expressed in this column represent e-list member responses to the query posted. They are not represented by the Aquatic Therapy and Rehab Institute and/or the author(s) of this column as recommendations regarding appropriate practice.*