Opinion or policy? SHAPE task force calls for widespread screening
Debate rages on about a report that recommends all men age 45 to 75 and all women age 55 to 75 years who are at risk of CVD be screened with computed tomography and/or carotid ultrasound. Don't miss the heartwire story on the Screening for Heart Attack Prevention and Education (SHAPE) task-force report, featuring comments from lead author **Dr Morteza Naghavi** and reactions and insights from **Drs Valentin Fuster**, **Robert Califf**, and others.

Read the full story, then join the forum discussion to share your opinion.

Sincerely,
The staff at theheart.org and WebMD
WebMD

Note: Please feel free to contact us at info@theheart.org or 1.514.931.5434 and/or review our Frequently Asked Questions

12 of 12 July 13, 2006 12:45

Bradley Bale

these screening tools work
There certainly is value in assessing risk factors to aid in determining risk. Every one should have a FRS calculated and if it is moderately high or high, you have a patient that deserves global risk factor assessment and aggressive treatment. We all realize many people who do not calculate high risk are actually at high risk. Many of these people can be uncovered by inexpensive screening for the presence of atherosclerosis by CIMT or CACS. If plaque is demonstrated, that person has atherosclerosis. It is an oxymoron to try to say it is mild or severe since we now know most events occur from non-obstructing plaque. What is probably more important is testing that addresses the current inflammatory state with tests such as HsCRP, PLAC-2, microalbuminuria, fibrinogen, etc. As mentioned in an earlier comment, we have taken this approach for years now with what appears to be stellar results. I propose a retrospective look at that data.

11 of 12 July 13, 2006 08:56

john younger

Time for a change

CIMT probably does more than just demonstrate plaque burden. A recent JACC article, using cardiac MRI, shows that
'Greater carotid IMT is associated with alterations of myocardial strain parameters reflecting reduced systolic and diastolic myocardial function' - Fernandes et al, J Am Coll Cardiol 2006;47:2420–8. This demonstrates the relationship between subclinical atherosclerosis and incipient myocardial dysfunction.

The time is coming for us to stop deciding on a patients risk profile by using surrogate measures of atherosclerosis, like BP and lipids, and to start imaging for arterial plaque. In years gone by, we assessed patients by clinical examination to establish the presence or absence of disease. Today, if we find an abnormality, we confirm or suspicions with a test, because we get more accurate results. Aortic stenosis provides a good example.
Even it the patient has severe aortic stenosis by examination, if the valve and LV look good on echo, the clinical findings are just misleading. The same will apply with coronary disease. Do you care about your normal BP if you already have plaque? We all have lots of patients post MI with 'normal' risk profiles. CAD is multifactorial, and just because your measured parameters are normal does not mean that you are not at risk. If YOUR CCAS was through the roof, would'nt you take a statin regardless of your risk profile? Surely our patients deserve the same standard care.

10 of 12 July 13, 2006 07:59

Melissa Walton-Shirley

Every bit helps

Bradley,
Thoughtful examination , either prospectively or retrospectively, will shed light upon this subject and will impact patient motivation as you mentioned but ultimately reimbursement issues.
How many times have I sent an elderly patient to CABG with no carotid Bruit to "justify" just a plain carotid ultrasound.When we do this, it's always bundled into the admission. Since we can't even get the third party payors to understand the wisdom in this practice, we have a long way to go in changing attitude about placque and prevention. Every bit helps. I applaud your efforts.
Melissa

9 of 12 July 13, 2006 05:38

Mike Hawke

screen

we need to be intellectually honest..of course screening with carotids would help with prevention of cad.
if we can't afford it we can't afford it.
don't say "oh it doesn't work' just because we can't afford it.
that is like countries that can't afford aggressive cath therapy saying 'oh these patients can wait for their bypass/cabg and we can do non

invasive testing'
be honest..if they can't afford to routinely cath just say so...as physicians and scientists we need intellectually honesty not political correctness for our patients and our own conscience

8 of 12 July 13, 2006 01:23

Bradley Bale

thanks Melissa
We have routinely been doing AAA screening along with PAD screening. I did not mention that in my note since the article was addressing the CACS and CIMT. We agree with you on an aggressive screening program followed by a global approach treating the risk factors. As mentioned in the article on theheart.org regarding my Rome presentation, one does not need to reduce LDL below 70 to get regression if a global approach is taken. What did you think about the retrospective study idea?
Bradley Bale

7 of 12 July 12, 2006 08:31

Melissa Walton-Shirley

Go Dr. Fuster!!
Bradley,
Welcome to the heart.org forum. Thanks for your post.
I've long advocated mass screening of asymptomatic but at risk individuals both in and outside of the cardiovascular arena. (Not just carotids and coronaries, abdominal ultrasound screening should be included for AAA screening/renal cell carcinoma/ovarian cancer.) It just makes sense, but probably didn't 20 years ago when we couldn't do much about carotid placquing anyway.
It's high time that we updated our approach to at risk patients. Bravo Dr. Fuster!!
Melissa

6 of 12 July 12, 2006 06:14

Bradley Bale

we have retrospective data to strengthen this advice
I am a family doc who has been using CACS and or CIMT to screen my patients for the last eleven years. We have tested over 3200 patients now and approximately 10% are secondary prevention. There has been only one patient to have a heart attack on treatment and two who went off treatment. There has been only one coronary mortality and that patient switched providers where her five meds were discontinued - she died six weeks later. Historically we should have seen over 100 events and 10 to 20 deaths. I believe our screening with CACS and CIMT has played a large role in our results. Admittidly there may be few patients lost to follow-up that might add to the event number, but I would think very few. The NIH could have a epidemiology team do a retrospective study of this population to throw more light on this proposal from SHAPE.
For more insight on our work please check www.theheart.org search "aggressive treatment"
I would be interested in comments.
Sincerely,

Bradley Field Bale, MD
bale20@msn.com

5 of 12 July 12, 2006 04:44

Westby Fisher

Financial Incentive vs Public Good

I have posted on this in my blog regarding by concerns with these recommendations at and am concerned about both cost to our patients and conflict of interests that exist when high-cost tests with unknown long-term carcinogenic risks are recommended on a large-scale basis. Realize that in 2004 dollars, the average out-of-pocket health care costs were just over $6100 per year for the average patient. How can we justify a "screening test" that costs nearly 5% of their entire annual healthcare budget?

4 of 12 July 12, 2006 12:11

Melissa Walton-Shirley

Agree

Guiliano,
Agree. The studies analyzing the impact of lifestyle characteristics like the mediterranean diet adherence, daily exercise, night shift work, stress, etc. really drive that point home. When it comes down to it, natural prevention is better where possible and nature never comes in a bottle.
Melissa

3 of 12 July 11, 2006 11:58

Giuliano Bortoluzzi

Primary Prevention

All these information about these test are very good, but still doesn't come, bringing solution for CVD epidemic in the world, nor even in the US, a rich country. Even a trial, proving that these methods can change heart disease prevalence, the US can afford for. Imagine screening people this way. When could it be possible?

I live in Brazil, have 33 years old and recently reviewed Circulation Controversies Article about pros e cons of CAC Score. The nowadays data doesn't convince about screening with EBCT, and we all know it. Even the professionals that participated in SHAPE guidelines knows.

I've been in World Heart Federation's Prevention Conference here in Foz do Iguaçu last year and could see 700 people from all over the world, including Drs. Fuster and Yussuf, Dr. Tuomihleto from Finland, people from the Framingham and the Interheart. There was 3 propaganda stand (from Becel, Aspirin Prevent (Bayer) and another one) and just few people from marketing. But some news for me were really astonishing. People from Finnrisk in Finland helped reducing to 80% the incidence in MI in 20 years mainly from lifestyle modification (8% of the reduction occured with invasive approach to ACS). These data shows the possible way to go. Wouldn't it be better at least by these days, to press industry for better policies on food, intensify primary prevention approaches and being more tough with our patients, so they could take their medication for real, instead of

complicating more and more the approach.

If someday anybody come with data proving and convincing we should do another way, so i could change my mind, even living in a low-meduim income country. But at these days, these new way SHAPE are trying to teach us how to prevent heart disease doe's not convince at all. And anybody that say directly by an opposite way, can have their assumptions questioned.

2 of 12 July 11, 2006 04:03

Dan Hackam

agreed

I think we are too inclined to treat inferior surrogate measures such as blood pressure values and cholesterol panels without any knowledge of what is happening to the arterial wall. It makes sense to me to have some sort of marker that is much closer to the vascular biology of the patient at hand and can be used to gauge progression or regression of plaque, determining how aggressive we need to be between visits. However I acknowledge that the vast majority of the medical community does not (yet) practice medicine this way; rather, we are all taught to treat by numbers. Slowly we are getting round to the idea that global risk conveyed by imaging is a much more powerful and accurate status indicator for treatment that simple physiologic parameters like HR, BP, and lipids.

1 of 12 July 11, 2006 01:27

Paul Lee

We perform carotid IMT on everyone

In my private practice clinic I scan everyone for carotid IMT (without using any special software) during echo, even though it is not reimbursed. I thought carotid IMT can be acquired quickly and without radiation risk, and I can do it easily on everyone (unlike cardiac CT) with minimal increase in scanning time.

My impression (I have not tabulated the data) is that most patients with multivessel diseases have moderately or severely abnormal carotid IMT, even if nuclear finding is only mildly abnormal. In addition, showing patients they have a plaque in the carotid strongly motivate them to take their statin. If nuclear scan is normal but carotid IMT is abnormal, we tell the patients they have non-obstructive atheroslerosis, and that helps guide our preventive treatment (for example, we would start someone with milldy elevated LDL if carotid IMT is elevated even in the absence of Framingham risk factors.)

I think of Carotid IMT as a window to the patient's plaque burden.

Paul C Lee MD
Cardiac cath lab
Mount Sinai School of Medicine, NYC.