

## Merck T3 Video Script

Video	Audio
TITLE GRAPHICS	MUSIC: thoughtful, melodic theme
GRAPHIC: beating heart	<p>NARRATOR: The following case studies are limited in scope and are not intended to represent a full and complete discussion of diagnosis and treatment information.</p> <p>“Heart failure” is a diagnosis that frightens people. It’s a diagnosis people want to deny. It has such an impact on self-perception and self-esteem that self-deception is common. Consequently, non-compliance is greater in this disease than in any other -- and the costs of this non-compliance are tragic.</p> <p>The purpose of this training tape is to give you a better understanding of the challenges involved in treating heart failure, so that you can paint a clearer picture of the disease to your physician-customers.</p> <p>In a moment you’ll be re-introduced to the three congestive heart failure patients you have met before, Sherman</p>
PHOTO COLLAGE: Sherman, William and Edna	

Powers, William Boles and Edna Phillips.

PHOTO: Victoria

You'll also meet Victoria Thompson, a patient facing a diagnosis of heart disease for the first time.

GRAPHIC:

Training Objectives:

- The chronic nature of CHF
- Quality of Life Issues faced by Patients with CHF
- The value of VASOTEC
- The value of PRINIVIL

And, by following their progress, you'll gain insights into:

- The chronic nature of congestive heart failure,
- The quality of life issues faced by patients with CHF,
- The value of VASOTEC in treating CHF patients, due to its demonstrated ability to reduce mortality and decrease hospitalizations, and
- The value of PRINIVIL in improving survival of patients within 24 hours of acute myocardial infarction

PHOTO COLLAGE: All patients and doctors

To thoroughly understand heart disease, you must be able to appreciate both the physician's and the patient's point of view. So pay particular attention to the emotions with which each patient deals with the reality of heart disease and how each meets the challenge of complying with his or her therapy.

FADE OUT

MUSIC OUT

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FADE IN

GRAPHIC: "Sherman Powers - "A Man at a Crossroads"

MUSIC: Thoughtful, Melodic Theme

EXTERIOR DAY–SHERMAN'S DRIVEWAY: Sherman engages in light exercise by shooting baskets with his college-age son

VO Narrator

Sherman Powers has been following his doctor's advise. He changed his diet. He's been exercising regularly. And, he's been taking his medications. As a result, the functional capacity of his heart has improved; his symptoms have been reduced; and the quality of his life has increased. Sherman feels better than he has in a long time. He feels more like his old self again -- and that might just be a dangerous feeling.

INTERIOR DAY–Sherman is in Dr. Thompson's office buttoning up his shirt as though he has just been examined

Sherman

I'm not kidding, Doc, I feel great. I should have started exercising a long time ago.

Dr. Thompson

I'm glad to hear you're feeling so good. How about letting me perform another echocardiogram to evaluate your progress?

INTERIOR LAB—Footage of Sherman receiving an echo

VO Narrator

Echocardiography can be used to evaluate heart function and to calculate a patient's ejection fraction, which is a measure of the amount of blood pumped out when the heart contracts.

This is a healthy heart.

CLINICAL FOOTAGE: Echo of a healthy heart

VO Narrator

Now compare that to Sherman's heart.

CLINICAL FOOTAGE: Echo demonstrating reduced ejection fraction

INTERIOR DAY—Dr. Thompson's office

Sherman

Well, Doctor Thompson, am I cured?

Dr. Thompson

Not in the way that you can be "cured" of a cold or the flu, no. Congestive heart failure is a chronic condition. Remember, your high blood pressure caused your heart to pump against high pressure over a long period of time.

GRAPHIC: Heart enlarging

Dr. Thompson

This caused your heart to become enlarged and the muscles of your heart to weaken. With your heart weakened, the pumping action of your heart was decreased to about 34%.

GRAPHIC FADES OUT

Dr. Thompson

This reduced blood flow is what caused your shortness of breath, difficulty sleeping and fatigue. Now, your condition has improved. Your echocardiogram indicated that the pumping action of your heart has increased from 34% to 45%; whereas normal is between 60 and 70%.

ANIMATED GRAPHIC: Normal ejection fraction

VO Narrator

This is the pumping action of a normal heart.

Now, compare that to the pumping action of Sherman's heart.

ANIMATED GRAPHIC: Ejection fraction reduced to 45%

Sherman

Well, I guess that proves I should have started exercising a long time ago. In fact, I don't know why I ever stopped. I went to college on an athletic scholarship, you know. I should have known that's what it would take to cure me. I feel so good I could . . . (laughing) I could eat a two-inch Porterhouse! That new diet is the toughest part!

Dr. Thompson

Sherman, what I hear you saying requires me to interject some words of caution here.

Sherman

Why? Am I feeling too good?

Dr. Thompson

I'm really glad to see how well you've done. But, as I said earlier, congestive heart failure is a chronic condition. It's very important not to become complacent about your condition and start exercising only when you feel like it, get off your diet or forget to take your medications.

Sherman

So . . . I'll never be cured? Is that what you're saying?

Dr. Thompson

Well, to answer your question, yes, your heart disease is always going to be with you. But, its impact on your life *can* be minimized through aggressive and consistent treatment. And, since the consistency of

your treatment is up to you, whether your condition degenerates or continues to improve is largely up to you. Sherman, I know you're feeling good, but you've got to resist the temptation to return to your former lifestyle. It's a challenge all too many CHF patients have failed to overcome.

Sherman

Well, I never met a challenge I didn't want to beat. I want to beat this one, too.

MUSIC: slow., thoughtful theme

GRAPHIC: "Class II CHF: •Slight limitation of physical activity •Comfortable at Rest • Ordinary physical activity results in fatigue, palpitation, dyspnea or anginal pain"

VO Narrator

When we first started following Sherman's case, Sherman was classified as a Class II CHF patient -- comfortable at rest, but limited in physical activity. Ordinary activity caused him fatigue and shortness of breath.

GRAPHIC: "Class I CHF: •Diseased, but without limitation of physical activity •- Ordinary physical activity does not result in fatigue, palpitation, dyspnea or anginal pain"

Narrator

Now Sherman's feeling better. He's moved from Class II to Class I. Now ordinary activity provides no obvious signs to keep him reminded of his condition; there are no overt symptoms to motivate compliance with his therapies. And now he might be tempted to become complacent. So Sherman stands at a crossroads -- and the path he takes...will impact the rest of his life.

FADE OUT  
MUSIC OUT

FADE IN

GRAPHIC: "William Boles - Making the Most of His Second Chance"

MUSIC: Opening Sting

transition to

INTERIOR/EXTERIOR DAY: montage of shots of William at work; driving, loading, unloading, carrying packages

VO Narrator

William Boles has also been following his doctor's advice -- and he, too, is doing better. If he takes it easy, he's able to work a whole day without experiencing shortness of breath. But, Bill is afraid he isn't getting better -- enough. He still worries that he'll land in the hospital again and go through the rest of his savings. He worries he won't make it to sixty-five. And these worries are keeping him from making the most . . . of his second chance.

INTERIOR DAY-LAB: William is just finishing an exercise stress test

VO Narrator

In patients with congestive heart failure, functional capacity has a direct impact on patient well-being and quality of life. Improvement of functional capacity is therefore a major goal of therapy. To assess functional capacity for class III CHF patients, routine exercise testing is recommended.

Dr. Thompson

How are you doing? Still feeling OK?

William

Yeah, I'm OK. How'd I do on my exercise test?



Dr. Thompson

Well, you went five-and-a-half minutes on the treadmill this time; that's a minute-and-a-half longer than last time. This indicates that your physical capacity is improving. How have you been feeling since your last visit?

William

Well, I guess I've been feeling a little better. I had to climb four flights of stairs once last week and I was OK with that -- but I couldn't have done another one. Is this as good as I'm going to get?

Dr. Thompson

Are you still following your diet and exercise program?

William

Yeah, I'm doing all that, but I still feel like if I had to run or something I could land back in the hospital -- then there goes the rest of my savings! And there goes my job! And my health insurance! I need to get better!

Dr. Thompson

Are you still taking your medications?

William

Yeah, sure, but -- that reminds me -- I'm almost out of those VASOTEC samples you gave me. What ever happened with that?

Dr. Thompson

Well, I spoke with a representative of the company that makes VASOTEC and found out that the majority of HMO's do reimburse for it -- even if it is not one of their preferred agents, as is the case

with your plan. So, I wrote a letter to your managed care organization and requested reimbursement for you. They called and tried to change my mind, but the bottom line is that under your plan VASOTEC isn't preferred -- but it is available. So, they will cover it.

William

Thank you, Doctor Thompson. But am I ever going to be able to work like I used to?

GRAPHIC: left ventricular hypertrophy

Dr. Thompson

Remember, the left pumping chamber of your heart is enlarged. The strain of your heart having to work harder to keep up with your body's demand for blood caused the ventricle to become dilated. As a result, your heart's pumping efficiency has decreased, and that results in an inadequate blood flow throughout your body. We can't reverse any of that. Yours is a chronic condition, which means it's going to be with you from now on.

GRAPHIC OUT

Dr. Thompson

But, while we can't reverse the damage done to your heart, we *can* help to control the blood pressure, shortness of breath and other symptoms it produces. And if you stay with your diet, keep exercising and take your medications regularly, you *may* continue to improve. But just how much you might improve is an open question. Whether you'll be able to climb five flights of stairs next week, or next year -- or ever -- there's no way to know. But, if you feel you can comfortably do something, you can give it a try -- as long as you back

off immediately if you feel any of your symptoms returning. Your life may never be the same as it was, but look how well you've done.

William

(thoughtfully)

Yeah . . . you're right. I'm living on a second chance and I should make the most of it.

(with a sheepish smile)

I should stop worrying so much, huh?

Dr. Thompson

Well, I can tell you this, Bill: many of my patients that comply with their prescribed therapy continue to live full and productive lives.

William

Hey, if they can make it, I can too. Thank you doctor Thompson.

FADE OUT

MUSIC: finale sting

FADE IN

MUSIC: opening sting

TITLE GRAPHICS: Edna Phillips - The Tragedy of Non-Compliance

INTERIOR DAY–HOSPITAL WAITING ROOM: Edna's daughter, very distraught, greets Edna's doctor

Daughter

Oh, Doctor Jackson, I'm so glad you could come! Have you spoken to the emergency room doctors?

Dr. Jackson

Yes, I have -- and it looks like your mother is in very serious condition.

As Doctor Jackson and Edna's daughter talk MOS (without sound), a VO narrator fill us in on what's happened

VO Narrator

It's been a couple of weeks since Edna's last trip to the emergency room. Edna has been experiencing progressive shortness of breath -- then, a few hours ago, at three AM, she woke up with extreme shortness of breath -- and it was all she could do to call the EMS. By the time they got to her, she was drenched with sweat, vomiting, cold and clammy and completely cyanotic. In the ER, Edna was given oxygen to help reduce the demand for cardiac output, Morphine sulfate to help decrease venous return and help control anxiety, thereby decreasing both preload and afterload, and Aminophylline to help reverse airway constriction.

Dr. Jackson

They've got her on a respirator now and they're doing everything they can. For now, we just have to hope for the best.

Daughter

(very nervously)

This is all my fault. I should have paid more attention. I should have helped her with her medications. She's always been so independent! I never thought of her as needing help. But, I should have insisted. I should have . . . done something to . . .

Dr. Jackson

Ms. Wilson, I've been your mother's physician for a long time, and I don't think there's much anyone could have done to prevent this. As you pointed out, your mother is a very independent, strong-willed woman -- and she simply never allowed herself to believe that she had a life-threatening disease. She lives on her own terms and I expect she'll go that way, too.

Daughter

But not now! She can't die! Her granddaughter's first dance recital is tonight and her grandson just made the baseball team! We're going shopping together next week! She can't die now! There's too much I never said to her! She's going to get through this, isn't she?

Dr. Jackson

Well, I . . .

The door to the waiting room opens, and a doctor, with his surgical mask hanging by one ear, appears with "the look" on his face

ER Doctor

Ms. Wilson? . . . I'm afraid I have bad news.

FREEZE FRAME: Close-up, Edna's daughter's face, reacting to the news of her mother's death

MUSIC: slow, tragic theme

VO Narrator

Edna's death is a result of pulmonary edema, simply defined as excess fluid in the lungs outside of the circulation. (BILL - PLEASE HELP DESCRIBE HOW THIS HAS CAUSED HER HEART TO FAIL)

GRAPHICS: over the freeze frame, graphics reinforce quantitative costs as the narrator enumerates them

VO Narrator

Congestive heart failure represents a significant economic burden for the healthcare system. In the United States, the annual cost of emergency room treatment for heart failure is more than fifty-million dollars. Total annual healthcare costs for heart failure have been estimated as high as thirty-six billion. Add in lost labor and the estimate climbs to one hundred-thirty-eight billion. But the costs in human terms are far greater, constituting of losses that can never be recouped. And in all too many cases, those losses are due to non-compliance with prescribed therapies.

FREEZE FRAME: shifts to frame of Edna's daughter with head bowed in grief MUSIC:  
crescendo and out  
FADE OUT

FADE IN

TITLE GRAPHIC: "Virginia Thompson - A Rude Awakening"

EXTERIOR DAY–FLOWER GARDEN: On an outdoor table, Virginia is potting  
Periwinkle seedlings

VO Narrator

Virginia Thompson makes the most of life. That's the way she sees it.  
She loves the earthy, sensual pleasures of life, like the feel of rich,  
organic soil and the smell of fresh-cut roses. She loves gourmet food  
and vintage wine, strong coffee and smooth tobacco. She always has.  
And she usually loves feeling the warmth of the sun as she works in  
her garden . . .

Virginia has just about finished potting a flat of periwinkles when she pauses and her face  
takes on a pained expression

VO Narrator

. . . but, today, it feels oppressive.

Virginia stops her work and moves uneasily to a chair in the shade

VO Narrator

She feels some tightness in her chest, a sensation she's felt before,  
usually in the middle of some physical activity. But this time the pain  
is worse. She wonders, as she has before, whether it might have  
something to do with the high blood pressure she was told she had  
some years ago, or with her smoking or her diet.

Virginia's pain and discomfort become visibly greater

VO Narrator

She tries to remember, as she has before, the last time she went to the doctor. It's been years. Maybe she should have gone in before now. Maybe she should be taking something for this. But now it feels like someone is squeezing her chest too tightly to breathe -- and the pain is moving into her arm.

Virginia's face draws taught and she struggles to breathe. She grabs her left arm as though it were painful to move and folds it tight against her chest, then very unsteadily makes her way toward the house

VO Narrator

And something unmistakable inside her tells Virginia that this time she cannot wait for it to pass. This time she has to get help.

MUSIC: Dramatic urgency

STOCK FOOTAGE MONTAGE: EMR vehicles in action; patient being unloaded from an EMR vehicle, wheeled into the ER, and being attended to

VO Narrator

The EMR team found Virginia experiencing intense mid-sternal chest heaviness with pain radiating to her left arm, shoulders, neck and back. She was perspiring heavily and breathing with difficulty.

On the way to the hospital, she was given nitroglycerin sublingually to help reduce the pumping load on her heart and aspirin as an anti-platelet agent.

GRAPHIC OVERLAY SCROLL:

Physical Exam

General Appearance: Uncomfortable and Diaphoretic BP: 102/50

Pulse: 105/min., Regular

Lungs: Bilateral Rales 1/3 Way Up

Neck: Jugular Vein Distention (9 cm): Carotid Volume Diminished Heart Sounds:

Distant Heart Tones, No S3 or Murmur Abdomen: Non-tender; No Hepatomegaly



Extremities: No Edema  
Skin: Pale and Clammy  
Laboratory Findings  
Creatinine: 1.1  
Potassium: 3.6  
CPK: 149  
ECG: Sinus Rhythm; Occasional PVC; Significant ST Elevation  
in Leads V1, V2, V3 & V4

VO Narrator

Virginia presents to the ER very distressed, anxious and perspiring. Her blood pressure is low, heart rate higher than normal, crackling sounds can be heard in her lung field, she has distended neck veins and her skin is pale and clammy.

She has blood drawn for a blood chemistry profile and is immediately given an ECG, which demonstrates significant ST elevation in leads V1, V2, V3 & V4 consistent with an acute infarction in the anterior portion of the left ventricle.

Virginia is intravenously given heparin as an anticoagulant and tissue plasminogen activator to help dissolve blood clots.

ER–VIRGINIA'S ROOM: Virginia is in bed with an IV as Dr. Levine comes into the frame

Virginia  
(weakly)

Who are you?

Dr. Levine

I'm Dr. Levine, the resident cardiologist here at Highland General.  
How are you feeling, Ms. Thompson?

Virginia

Better than I did when I came in. The pain's not as bad and I can breathe better. Did I have a heart attack?

Dr. Levine

Yes, mam, you did. The test and lab work performed by the ER doctors indicate that you had what we call an infarction in the anterior, or front part, of your left ventricle, probably due to an obstruction in the left anterior descending artery, which supplies that part of the heart with blood.

Virginia

What does that mean? Am I going to be okay?

Dr. Levine

Well, let me tell you what's happening.

GRAPHIC: Animated heart demonstrating a myocardial infarction of the LAD

Dr. Levine

Your heart is a muscle and it needs a constant supply of blood in order to function. When a coronary artery, which supplies the heart with blood, narrows or closes altogether, your heart can't get the oxygen it needs, so it begins to die. The medical term for heart attack is myocardial infarction.

GRAPHIC OUT

Dr. Levine

On the way to the hospital they gave you aspirin to help thin your blood and nitroglycerin to help dilate your arteries, so treatment was started early. That's certainly in your favor. Then, in the emergency

room, you were given drug therapy to help to dissolve blood clots. That's what your obstruction is likely to be. That was about a half an hour ago. Now, I see your blood pressure is up to 110 over 70 and your heart rate is down to 90. I want to perform a second ECG to determine the status your infarction.

GRAPHIC: ECG tracings demonstrating ST segment elevation in leads V1, V2, V3 & V4

VO Narrator

Virginia's ECG demonstrates a recurrence of significant ST segment elevation.

GRAPHIC OUT

Virginia starts breathing more heavily and begins to perspire as Dr. Levine listens to Virginia's heart with his stethoscope

Dr. Levine

Ms. Thompson, are you feeling okay?

Virginia

I felt okay when you asked before, but now the pain is coming back.

Dr. Levine

Given your continued pain and the findings of your second ECG, the clot-dissolving drugs are probably not being as effective as we would like. As we discussed earlier, a heart attack is the damaging or death of an area of the heart muscle resulting from a reduced blood supply to that area. If the blood supply is cut off severely or for a long time, muscle cells suffer irreversible injury and die. Disability or death can result, depending on how much heart muscle is damaged.

Therefore, I'd like to get a better idea of where your coronary occlusion is located. We can do that by inserting a thin, flexible tube into an artery in your groin, threading it up your aorta and into the coronary arteries individually. Contrast dye will be injected into each artery, allowing us to see any arterial narrowing or occlusions as the dye passes through each artery.

This procedure is called angiography and is very safe. There is some risk of bleeding, some possibility of stroke or heart arrhythmia, but the odds of complications are really minimal and it's the best way we have of seeing where the blockage is, how bad it is and whether any other arteries are involved. Is that okay with you?

Virginia

Okay.

MUSIC IN: Serious, suspenseful theme  
CLINICAL FOOTAGE: Angiography

VO Narrator

Coronary angiography and ventriculography were performed on Virginia, revealing single vessel disease, with a complete occlusion in the mid left anterior descending coronary artery, with an apparent large thrombus present. Left ventriculography revealed akinesis of the anterior wall, with moderately depressed overall left ventricular function.

CLINICAL FOOTAGE OUT

VIRGINIA'S HOSPITAL ROOM: Virginia is in bed with an IV as Dr. Levine comes into the frame

Dr. Levine

You have a complete occlusion in the artery that supplies the front part of your heart with blood. There's virtually no blood at all getting through. Therefore, we would like to perform a procedure called angioplasty to help restore blood flow to the injured cardiac muscle.

Virginia

What exactly does that involve?

Dr. Levine

It's a process in which we thread a catheter with an inflatable balloon on the end of it into the occluded area where the balloon will be inflated to open the artery to restore normal blood flow. The procedure may involve some discomfort, in that you may experience chest pain when the balloon is inflated, but this procedure is necessary to help prevent extensive tissue damage.

CLINICAL FOOTAGE: Angioplasty images

VO Narrator

Virginia underwent an immediate infarct vessel balloon angioplasty of her occluded LAD lesion, with complete resolution of her chest pain, re-establishment of normal flow, and with a reduction in the occlusion from 100% to 20%. She was then transferred to the coronary care unit for observation in a hemodynamically stable condition. Her blood pressure registered 110 over 80 and her heart rate was 90.

CLINICAL FOOTAGE OUT

VIRGINIA'S HOSPITAL ROOM: Virginia is resting comfortably as Dr. Levine enters

Dr. Levine

How are you feeling?

Virginia

I'm feeling much better, thank you. How did the procedure go?

GRAPHIC: Animation of blockage opening with restoration of blood flow

Dr. Levine

The procedure was very successful. We were able to reduce your obstruction from 100% to 20%, which restored blood flow to the affected area. Your heart suffered only minor tissue damage.

GRAPHIC OUT

Virginia

Good. That's a relief. So, where do we go from here?

Dr. Levine

In cases like yours, it's not uncommon for blockages to re-occur during the healing process. So, we want to watch you closely for a few more days and begin a drug therapy regimen. We're going to give you aspirin to help prevent the further formation of blockages, a beta-blocker, which has demonstrated ability to improve long-term prognosis in heart attack patients, Zocor to help reduce cholesterol and a drug called PRINIVIL, which is a vasodilator shown to reduce mortality if started within 24 hours of a heart attack such as yours. We'll start you out at point-five milligrams a day and then increase the dosage to ten milligrams in a few days.

FADE OUT/FADE IN

VIRGINIA'S HOSPITAL ROOM: Virginia is sitting up in bed reading when Dr. Levine comes in

Dr. Levine

How are you, Virginia? About ready to go home?

Virginia

Just try to stop me!

Dr. Levine

Have you had any chest discomfort or difficulty breathing?

Virginia

No, I've been feeling pretty good.

Dr. Levine

Good -- I'm glad to hear that you're doing well. Now let's talk to you about the lifestyle modifications you need to make.

Virginia

I'll bet you're going to tell me I have to cut down on my smoking, huh?

Dr. Levine

No, I'm going to tell you that you have to quit smoking altogether. There are several factors that determine a person's risk for heart attack. Your gender works in your favor, however, your age does not -- and neither does your weight or cholesterol level. I'm going to have our dietitian come in and talk to you about that before you're discharged. Lack of exercise is also a big risk factor. We'll help you with that, we'll enroll in a cardiac rehabilitation program at your local hospital. But, Virginia, smoking is one of the highest risk factors. It not only adversely affects your heart and lungs, but every other organ of your body as well. That has to go. If you'd like some help quitting, there are some therapies available to help with the withdrawal and support groups to help you adjust to life without it. I'll have someone come by and talk to you about that, as well.

Virginia

Sounds like I'm going to have to listen to a lot of lectures before you let me out of here!

Dr. Levine

Virginia, a heart attack is a life changing event that needs to be taken seriously. When you leave, you must be faithful about taking the medications I've prescribed -- the aspirin, Zocor, beta-blockers and PRINIVIL -- every day. I'm also going to give you a prescription for nitroglycerin for chest pain.



I'd like for you to begin walking every day, beginning with a block at a time -- but, be sure to stop if you feel any discomfort. You'll also need to refrain from lifting anything heavier than ten pounds for the next six weeks, at which time I want you to come in for a treadmill stress test to determine if there is any residual or recurrent myocardial ischemia or functional disability.

And I'll need to see you every week for a month or so to monitor your progress.

Virginia

OK. Those life-style changes are going to be tough. But I know I have to do it -- and I'm grateful for the opportunity. Thank you, Dr. Levine . . . really . . . thank you.

MUSIC: final sting  
TAIL GRAPHICS