Presenter: In this morning's *Healthwatch*: healing hearts. This morning researchers are reporting what could be a major **breakthrough**: cardiac stem cells can repair **damage** from a heart attack. Correspondent Bill Whitaker reports on one man whose life has been changed by the new promising treatment.

Whitaker: So Ken how are you feeling?

Ken: I feel fantastic.

Whitaker: When we first met Ken Milles 2 years ago he had suffered a serious heart attack. At age 39, 30% of his heart was damaged. He faced a shortened life with shortness of breath and restricted exertion.

Dr Marban: If someone's had a heart attack and they have seen part of their heart turn into **scar**, that is irreversible, it's there for life.

Whitaker: So Dr Eduardo Marban, director of the Cedars Sinai Heart institute in Los Angeles convinced Ken Milles to be patient number one in a risky **first-of-a-kind** clinical trial. Dr Marban used a catheter with tiny **pincers** to **snip** bits of healthy tissue from Milles's heart. In a laboratory, he **coaxed** the tissue **into** manufacturing millions of stem cells which were then deposited in the damaged area of the heart. Milles's was one of 25 trial subjects, and the results are now in.

Dr Marban: The subjects who received cells had a dramatically better response than the control subjects.

Whitaker: All the stem cell recipients had stronger heartbeats and their heart attack scars were reduced on average by almost 50%. Damaged muscle was replaced by new healthy heart tissue. Ken Milles had better than 50% improvement.

Dr Marban: It's the very first time in my experience that we've actually exceeded our expectations when we're doing a human trial.

Whitaker: Doctors say Ken Milles's heart looks almost normal again.

Ken: It's like someone gave me a magic pill. I felt better all over, suddenly. You know, it's science fiction to me, basically. It's what it feels like.

Whitaker: These are just the first results of a unique study, results cardiologists find promising.
Bill Whitaker, CBSnews, Los Angeles.

Presenter: And here with us now, Dr Holly Phillips, always nice to see you. So give us an idea because it sounds promising of course. How could this treatment actually revolutionize the treatment for heart failure?

Dr Phillips: Well, you know it can make a dramatic difference because we've never before thought of heart disease as a curable or a reversible condition. The treatment has always focused on minimizing symptoms and making living with heart disease better. This completely changes the landscape of how we think about the illness. The other thing is this is the first time cells from the heart have been used to treat the heart. Before we've attempted to treat the heart with stem cells from bone marrow but this the first time they actually come from the organ and that gives us hope for possible other organs maybe we can use cells from the kidney to treat the kidney or cells from the liver to treat the liver and so forth.

Presenter: So we're talking at particularly people in this country who've had heart failure. What exactly puts you at risk for this?

Dr Phillips: By far, the most common risk factors are coronary artery disease and heart attack. That causes the vast majority of heart failure symptoms. Also high blood pressure, diabetes and even sleep apnea can contribute. So there are a number of factors that can cause heart failure but once you have it it's a very serious illness. One in five people who are diagnosed with heart failure die within a year of diagnosis.

Presenter: Really quickly, we've got about 15 seconds. If you've been diagnosed with that, how can you keep the condition from worsening?

Dr Phillips: There are many ways, but probably the single most important thing, if you do only one thing is to quit smoking. Smoking raises your blood pressure, and makes your heart beat faster. Both of those things stress your heart and can make your heart failure symptoms much worse. That's the one thing you have to do.

Presenter: Dr Phillips, thank you, good to see you as always.
CBSnews.

Lexical helpline.
A breakthrough = une avancée spectaculaire
Damage = lésions
scar = tissus cicatriciels
First-of-a-kind = une première
Pincers = forceps
Snip = découper de petits morceaux
Coax into = stimuler, pousser à