Heart Attack or Sudden Cardiac Arrest: How Are They Different?

People often use these terms interchangeably, but they are not synonyms. A <u>heart attack</u> is when blood flow to the heart is blocked, and sudden <u>cardiac arrest</u> is when the heart malfunctions and suddenly stops beating unexpectedly. A heart attack is a "circulation" problem and sudden cardiac arrest is an "electrical" problem.

What is a heart attack?

A heart attack occurs when a blocked artery prevents oxygen-rich blood from reaching a section of the heart. If the blocked artery is not reopened quickly, the part of the heart normally nourished by that artery begins to die. The longer a person goes without treatment, the greater the damage. Symptoms of a heart attack may be immediate and intense. More often, though, symptoms start slowly and persist for hours, days or weeks before a heart attack. Unlike with sudden cardiac arrest, the heart usually does not stop beating during a heart attack. The heart attack symptoms in women can be different than men.

What is cardiac arrest?

Sudden cardiac arrest occurs suddenly and often without warning. It is triggered by an electrical malfunction in the heart that causes an irregular heartbeat (<u>arrhythmia</u>). With its pumping action disrupted, the heart cannot pump blood to the brain, lungs and other organs. Seconds later, a person loses consciousness and has no pulse. Death occurs within minutes if the victim does not receive treatment.

It was the fourth quarter with 2 minutes left until the end of the junior varsity football game against Lake Weir High School. Citrus High School freshman Chip Stoskopf had sat patiently on the bench every week since the start of the season.

But this game, Thursday, Oct. 8, 1992, coach Ken Berry had promised the eager young wide receiver that he could play.

"That game — his dream the whole year was for him and his best friend Frank to play in a game together," said Chip's mom, Connie Denney, from her home in Fort Myers. "Frank had been injured at the beginning of the season and this was Frank's first game that he was going to play in. The coach called both their names, and they ran out on the field together."

Chip took his place on the line of scrimmage. The ball was snapped, a whistle blew and Chip collapsed on the field before he even had a chance to play.

Later, an autopsy would reveal that he died from sudden cardiac arrest.

He had an irregular heartbeat in the lower chamber of his heart that would have most likely not been detected through a stethoscope, but would have been found with an EKG screening.

Now, 25 years after his death, Chip's mother, one of Chip's childhood friends and the nonprofit organization Who We Play For are crusading to have EKG screenings as part of the mandatory physicals for school athletes.

Their mission is to reduce the incidence of sudden cardiac arrest (SCA) death in teens and young adults. Who We Play For, a national organization, comes into communities and provides EKG screenings for student athletes for \$20, explained Evan Ernst, Who We Play For founder.

"In some communities, local hospitals will cover the cost," Ernst said. "All we need is for school districts to say, 'We want to do this,' and then collect the consent forms as part of the sports physical packets and tell us what day to be there."

Jamie McBrearty, soccer coach at Leon High School in Tallahassee, was the one who recently put Connie Denney in touch with Ernst.

McBrearty, Chip's childhood friend, said they played soccer together as kids in the East Citrus Soccer League.

"I remember Chip as a hard worker," McBrearty said. "As a teammate throughout middle school, he was one of those kind of guys who was very disciplined, very respectful. Now that I'm a coach, Chip is the kind of guy that coaches want on their team."

The week before the game against Lake Weir, Chip almost quit the team.

Although he didn't complain to the coach, he was disappointed that he hadn't been put in a game.

"I told him, 'You've never quit anything before in your life. You wanted to play this, so you're going to go to the coach on Monday and you're going to be a man, sit down and tell the coach why you want to quit.' He went in, but he never had to say a word to the coach," Denney said.

She said the coach had called Chip up in front of the whole team, put his arm around his shoulders and said, "I totally forgot to play you, but you didn't come crying to me like some of the other kids do when I tell them they can't play."

"That made him really, really, really happy," she said. "And he promised to play him in the next game." Recalling the events of that game, Denney said it was pouring down rain. When she saw Chip collapse on the field, she climbed out of the stands and rushed to the fence at the edge of the field, her own mother screaming behind her.

"The assistant coach was at the fence and I said, 'How do I get over this fence? — I'm his mom.' I don't know how I did it, but I got over the fence," she said. "When I got to him, the minute I touched his hand, I knew he wasn't alive. I started yelling. ..."

A woman who identified herself as a cardiac physical therapist also rushed onto the field and got Chip's heart beating and stayed with him until the ambulance came.

They rushed Chip to Munroe Regional Hospital in Ocala.

"That was Thursday, and he died on Friday, Oct. 9, at 4:30 in the afternoon," Denney said. "They kept working on him, but I said, 'That's it. He's done. He needs to be at peace.'

"It's been 25 years and our young athletes are still dying on football and soccer fields and basketball courts, and we can stop this," she said. "There are tests out there that most of us parents don't realize we should have done for our children. If I would've known, I definitely would've had it done."

Questions:

- 1) What is the difference between a heart attack and cardiac arrest?
- 2) Does Cardiac arrest or a heart attack have more to do with what we eat?
- 3) Why could a lacrosse ball to the chest cause cardiac arrest? Could it cause a heart attack?
- 4) What is necessary in order to save a person with cardiac arrests life?