

Broken Heart Syndrome

Introduction:

Researchers have discovered that receiving unexpected news, like the death of a loved one, can cause a potentially deadly heart condition. This condition is called stress cardiomyopathy and is commonly called Broken Heart Syndrome and was first described in 1991 in Japan. This is when the heart suffers from days of adrenaline increase and other stress hormones that shock the heart and is usually misdiagnosed as a massive heart attack. When a person is shocked or stressed, chemicals are released by the nervous system into the blood stream. Similar heart attack symptoms are produced including fluid in lungs, chest pain, and heart failure. Typical patients suffering from Broken Heart Syndrome are middle aged to elderly women and a strange characteristic is that most of these patients have next to no risks for heart disease and are healthy. The recovery is also much quicker, only a couple of days. It is still unknown how these stress hormones “stun” the heart, but plans of future studies are in the makings. It is also proven to be a deadly disease. I chose this project because I had no idea what Broken Heart Syndrome could be and wondered if it was an actual disease or just a myth. I realize that this is an actual disease and is much more serious than I expected.

Section 1: Background and Problem Statement

Web site #1: “Broken Heart Syndrome: Real Potentially Deadly but Quick Recovery”

Score (28)

http://www.hopkinsmedicine.org/press_releases/2005/02_10_05.html

This Web site provided excellent background information about Broken Heart Syndrome. It is an article about a recent study done on this syndrome. Even the medical terms within the article were made understandable for the common reader. It discussed key symptoms and the similarity between a massive heart attack and this new syndrome. It discussed the differences that the Broken Heart Syndrome had from a massive heart attack. It stated some questions that many experts still have on the subject and there will be future studies performed in the near future.

Web site #2: “Broken Heart Syndrome” **Score (28)**

http://www.epigee.org/broken_heart.html

This Web site provided more background information than the first. It included the date it was first described and who first found it. It also describes more possible factors that could lead to Broken Heart Syndrome. This article goes more into depth of treatments for the syndrome as well and was overall a good article.

Web site #3: “Takotsubo Cardiomyopathy or Broken Heart Syndrome” **Score (24)**

Found through Healthy People 2010

<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1847940>

Although this article is difficult to understand because of the medical terms, I believe it overall provides excellent background information on the subject. It states the up and coming disease and where it was first discovered. It also gives a list of four patients and describes their condition. This is overall a decent article providing the most background information so far.

Web site #4: “Takotsubo Cardiomyopathy” **Score (26)**

http://en.wikipedia.org/wiki/Takotsubo_cardiomyopathy

This article is also another good article about the background of Broken Heart Syndrome. It also provides the etiology, histology, and treatment. It also compares a massive heart attack to this syndrome. Because this syndrome is fairly new, it discusses how some factors are still unknown. It is an overall informational article.

Section 2: Research

Web site #1: “Apical ballooning syndrome or takotsubo cardiomyopathy: a systematic review” **Score (26)**

<http://eurheartj.oxfordjournals.org/cgi/reprint/27/13/1523>

This article discusses the research process as well as the many different results. It states that twelve studies helped them determine the age distribution. It also states that 11 of the 14 studies helped detect atherosclerotic coronary heart disease, a risk factor. The most common symptoms were also determined and described. This article, although very informational was extremely difficult to read with all of the medical terms. For those who know the medical terms, this would be a very helpful article about the research.

Web site #2: “Transient Left Ventricular Apical Ballooning After Cocaine Use: Is Catecholamine Cardiotoxicity the Pathologic Link?” **Score (24)**

<http://www.mayoclinicproceedings.com/inside.asp?a=1&ref=8106cr2>

This article discusses LVAB, which is also known as Takotsubo Cardiomyopathy or Broken Heart Syndrome. It talks about how LVAB has not been reported previously in association with the use of cocaine, but with this one case study, it seems to be a contributing factor. As much as this article is interesting seeing how cocaine seemed to bring out the LVAB, it does not provide more information on the research of Broken Heart Syndrome.

Web site #3: “Takotsubo Syndrome: A Bayesian Approach to Interpreting Its Pathogenesis” **Score (26)**

<http://www.mayoclinicproceedings.com/inside.asp?a=1&ref=8106e2>

This is another article from the Mayo Clinic, and this article uses a different approach to discuss the research done for Broken Heart Syndrome. Especially with this syndrome, which has only recently been recognized, researchers use the Bayesian principles to help determine how common this disease actually is. This article presents the information about the heart, and how

Broken Heart Syndrome affects other common heart diseases, this article is also difficult to understand many medical terms, but still manages to provide good information.

Web site #4: “Apical Ballooning Syndrome: An Important Differential Diagnosis of Acute Myocardial Infarction” **Score (26)**

<http://circ.ahajournals.org/cgi/reprint/115/5/e56>

This is a good article by the American Heart Association telling about how stress does affect the functions of the heart. The most common patients appear to be postmenopausal women, and are healthy, but still undergo heart failure. This article is presented clearly despite the medical terms, and is very informational.

Section 3: Statistics

Web site #1: “Study Offers Clues to Broken Heart Syndrome” **Score (27)**

<http://news.bio-medicine.org/medicine-news-3/Study-offers-clues-to-Broken-Heart-Syndrome-886-1/>

This is a good Web site in which it provides an article about the studies done to recognize Broken Heart Syndrome. It includes where research has been done, how many have been diagnosed. It also states that 95% of patients were women and 60% experienced stress prior to their treatment. As well as many other helpful statistics.

Web site #2: “Mayo Clinic Research Reveals ‘Broken Heart Syndrome’ Recurs in 1 of 10 Patients; Finds Blood Flow Abnormality in Most ‘Broken Heart Syndrome’ Patients” **Score (27)**

<http://www.mayoclinic.org/news2006-rst/3771.html>

This article reports on clinics in Chicago and research relating to Broken Heart Syndrome. It goes into depth about two specific studies. However, this article goes into depth about Apical Ballooning Syndrome and did not state how it relates to Broken Heart Syndrome, so it took me a little while until I finally realized it was discussing the same thing.

Web site #3: “Broken Heart Syndrome Mimics Heart Attacks” **Score (26)**

http://www.ynhh.org/healthlink/cardiac/cardiac_5_05.html

I found this article to be very helpful. It at first discussed the relationship between stress and heart attacks, creating the disease Broken Heart Syndrome. This Web site held many helpful statistics such as “Stress hormones were two to three times greater than those in classic heart attack patients and between 7 and 34 times greater than in healthy people.” This article not only provided good information but was also easy to read.

Web site #4: “Study Offers Clues to Broken Heart Syndrome” **Score (29)**

<http://www.bio-medicine.org/biology-news/Study-offers-clues-to-Broken-Heart-Syndrome-5289-2/>

This Web site also offers some background information on Broken Heart Syndrome as well as some statistics on the second page. “The most common symptom of broken heart syndrome was chest pain, in 70 percent of patients, followed by shortness of breath in 33 percent,” is an example of one statistics that was used in the article to show the common symptoms in patients. This article did not include an overwhelming amount of medical jargon, so was much easier to understand.

Section 4: Consumer Information

Web site #1: “Broken Heart Syndrome” **Score (19)**

http://www.princegeorgescountymd.gov/FireEMS/PDFs/health_tips/Health_Tip-Broken_Heart_Syndrome.pdf

This article is extremely easy to read and would be an excellent article to give someone who knows nothing about the disease. It provides the reader with background information, information on how it was discovered, symptoms of the disease, and those at risk. It is a short article and gets right to the point.

Web site #2: “Mending a Broken Heart” **Score (29)**

<http://www.mayoclinic.org/medical-edge-newspaper-2007/feb-18.html>

This article provides an answer to a frequently asked question. At first look this Web site might look untrustworthy, but with the presence of “.org,” and my understanding of how important the Mayo Clinic has been in researching this disease, I know this Web site is indeed trustworthy. It presents the information easily so readers with no other knowledge of the disease can understand it. It also provides helpful information on treatments.

Web site #3: “Largest U.S. Registry of Patients with Takotsubo Cardiomyopathy Aids Physicians in Diagnosis, Management” **Score (25)**

http://www.scai.org/pr.aspx?PAGE_ID=5085

This article does provide helpful information, but however, does not present it in the best way. It provides good statistics, and little background information. I do find that this article mostly talks about how unsure the topic is since it is a newer discovered disease. Despite this, the background and statistics are still informative and understandable.

Web site #4: “MGH Cardiologists Publish Story on Broken Heart Syndrome in Marin” **Score (24)**

http://www.marinegeneral.org/news/08_09_cardiologists.html

Although a short article, it presents the information in a more straightforward way. It states how the disease could be caused and provides examples of patients. It provides helpful statistics and

also physical symptoms. The article doesn't provide as much helpful information, but the information it does provide is given simply, so overall is a decent article.

Conclusion:

Section #1: Background Information

Best Web site: "Broken Heart Syndrome: Real Potentially Deadly but Quick Recovery"

- I chose this one because it provided the most in depth information on the subject and was at the same time easy to understand. It provided information such as common symptoms, treatments, as well as background information on the disease.

Worst Web site: "Takotsubo Cardiomyopathy or Broken Heart Syndrome."

- Even though this Web site did provide helpful information, it did not provide information that was easy to understand nor did it go into depth about the background of the disease.

Section #2: Research

New information I learned include:

- I learned through this research I learned that the most common patients with this disease are postmenopausal women and are mostly healthy, but still undergo heart failure. I did not know that this disease mostly affected women and that they were found to be without risk of heart disease, but still showed heart failure.

Section #3: Statistics

New statistics I learned include:

- "The most common symptom of broken heart syndrome was chest pain, in 70 percent of patients, followed by shortness of breath in 33 percent." I was surprised to find that only 70% of people actually received chest pain when they were found to have Broken Heart Syndrome, I would have thought that this was the most common symptom in everyone.

Section #4: Consumer Information

Best Web site: "Mending a Broken Heart"

- This article is extremely easy to read and would be an excellent article to give someone who knows nothing about the disease. It provides the reader with background information, information on how it was discovered, symptoms of the disease, and those at risk. It is a short article and gets right to the point. The Web site is also very user friendly.

Worst Web site: "Broken Heart Syndrome"

- Although this article does provide helpful information, it does not present it in the best way. It provides good statistics, but only a little background information. I find that this article discusses how unsure the topic is since it is a newer discovered disease. It is also

difficult to determine any information about the site, it provides no links, no contact information, and is not user friendly.

Overall, the Web sites I haven't chosen to include were good Web sites. I had occasionally found Web sites that were difficult to understand or the information was presented in a confusing manor. Information was also difficult to come across because it is a new disease to the United States. I have learned a lot about this disease in this project because previously I had only thought it was a myth not an actual disease. I was also surprised to find that it affected mostly postmenopausal women who were mostly healthy and was suffering heart failure. I was also shocked to discover that the recovery is fairly quick. I learned a lot through examining these Web sites and found them overall helpful.

Back to Betty C. Jung's Web site	http://www.bettyjung.net/
Back to Web site Critique Reports Directory	http://www.bettyjung.net/Pch201wsreports.htm

Broken Heart Syndrome (Class Handout)

- The best Web site I found for background information was through Hopkins Medicine:
http://www.hopkinsmedicine.org/press_releases/2005/02_10_05.html. I chose this Web site because it provided the most in depth information on the subject, was easy to understand, was user-friendly, and was the most up-to-date.
- The best Web site I found for research was by the American Heart Association:
<http://circ.ahajournals.org/cgi/reprint/115/5/e56>. This Web site tells the reader about how stress does affect the functions of the heart. This article is presented clearly despite the medical terms, and is overall the most informative.
- The best Web site I found for statistics was through Biomedicine.org: <http://www.biomedicine.org/biology-news/Study-offers-clues-to-Broken-Heart-Syndrome-5289-2/>. This Web site offered background information on Broken Heart Syndrome as well as many statistics. This article did not include an overwhelming amount of medical language, so was much easier to understand.
- The best Web site on consumer information was through the Mayo Clinic:
<http://www.mayoclinic.org/medical-edge-newspaper-2007/feb-18.html>. This Web site is extremely easy to read and would be an excellent article to give someone who knows nothing about the disease. It provides the reader with background information, information on how it was discovered, symptoms of the disease, and those at risk. It is a short article and gets right to the point and is user-friendly.