The information contained in this e-book is intended for general reference purposes only. It is not a substitute for professional medical advice or a medical exam. This information should not be used to diagnose, treat, cure, or prevent any disease without the supervision of a medical doctor. Always seek the advice of your doctor or other qualified health care professional before starting any new treatment. You should by all means discuss any major change in your diet or activity level with your doctor.

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48 Andover Place
Robbinsville, NJ 08691
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Hello, fellow achalasia sufferer,

Before we begin, let me just say that I hope that you are feeling well and that you’ve been able to successfully manage your condition to this point. I know firsthand how tough that is when you have achalasia.

I’m the sort of person who likes to have things under control. So, when I was diagnosed with achalasia, I wanted to learn all I could about my condition. But, I quickly realized that it was not easy to find clear information about achalasia written for the layperson. I spent a few months doing research. I discovered plenty of highly clinical sources with lots of statistics and technical information, but very few of them helped me understand what I wanted to know about achalasia.

Along the way, I noticed that I wasn’t alone in joining the achalasia “club.” (Perhaps we should be known as the Achalasians!) So, I started to think about using my research to put together an e-book that would save others from the struggle to learn that I went through.

Furthermore, Achalasia and Gastroesophageal Reflux Disease “GERD” share similar symptoms, such as painful chest spasms, regurgitation, and heartburn, making both conditions interesting to study in order to understand its similarities and differences to prevent any misdiagnosis.

This e-book is a collection of my research findings. I hope it’ll be of value to you.

With warmest regards,
Part 1: My Story
Whose Story Is This? (a snapshot)

**Gender:** Male

**Age:** 35 years

**Profession:** Management, finance

**Family details:** Married (9 years), two children ages 5½ and 2½

**Personality:** Type “A”

**Sign:** Leo

**Weight before Achalasia:** 170 lbs

**Weight before surgery:** 150 lbs

**Current weight:** Stable at 150-155 lbs

**Initial exams:** Physical, upper GI, endoscopy with biopsy

**Initial diagnosis:** GERD given antacids for control, diet restrictions

**Total elapsed time between first symptoms and surgery:** 3 years

**Additional exams:** Endoscopy with biopsy, manometry, x-rays. The manometry was repeated to confirm the results given.

**Additional medication given:** Just medication to treat an ulcer. It was a 30-day prescription.

On the next page, you’ll see a timeline that gives a kind of overview of how my condition progressed, from the time I started having symptoms, until I finally got the treatment I needed.
My Achalasia Timeline

**JUNE 1999**
First pain on flight from Newark, NJ to Bogota, Columbia - sporadic & brief at first

**2000**
Started feeling full really easily; unable to drink a whole glass of water at one time

**2001**
- Started losing weight; belly distended
- Occasional regurgitation
- Swallowing foods becomes harder; sometimes have to spit food out
- Develop water brash ... thick, white, foamy saliva that comes up from my throat into my mouth
- Start having hard time swallowing liquids, especially beverages such as sweet juices, which tend to generate more saliva
- Frequent, strong sensation of food or air stuck in my throat
- Chest pain coming more and more often ... and getting stronger & stronger

**2002**
- More frequent spasms ... getting really annoying
- January: Diagnosed with Achalasia - at last!
- SURGERY!

**TODAY**
Does my story sound like yours?

How my story began...

I suffered from chest pains for a long time, at least a couple of years. Two years ago, I decided to go to my doctor for a physical. Since I was complaining of chest pain, they did an echocardiogram to check for signs of a heart attack. To my relief, my heart was in great condition. After more questions, my doctor ordered an upper GI exam, which is an x-ray of the upper gastrointestinal tract. So I made an appointment and got it done. After my doctor got the results, he referred me to a specialist in stomach diseases called a gastroenterologist.

That doctor told me that he needed to see inside my GI tract to make a diagnosis, so the next thing I knew, I was getting ready for an endoscopy. I arranged to have the procedure done at the closest hospital. It so happened that my family was on vacation at the time. For an endoscopy, they give you sedatives, which make you sleepy for an hour or so. Since that means it's unsafe to drive after the exam, I made plans for my cousin to take me to and from the hospital.

During the endoscopy, they pass a tube called an endoscope through your mouth and down into your throat. The tube has a light at the end of it that helps the doctor see the inside of your esophagus, your stomach, and even some of your duodenum, which is part of your intestines. (I don't want to go into the medical details of any of the procedures because then this will become a medical book, and that is not my objective!) As part of the endoscopy, they take a sample of the tissue called a biopsy, to see if there are any signs of cancer. They also look for tumors, ulcers, and the condition of the mucous in your GI tract. About an hour or so after the test, I woke up feeling really rested. Many people complain about headaches, nausea, and dizziness, but not me. I'd had a wonderful and profound sleep. It was the best rest I'd had in years!

When I woke up, the doctor talked to me about what he'd found. I can barely remember what he said now, but I scheduled a follow up visit to discuss the results. When the results were ready, I had a one on one with my GI doctor. He told me I had GERD, which stands for gastroesophageal reflux disease, and showed me a booklet with a picture of a monster having a nightmare. This was supposed to help me understand it better. Some color pictures are also part of the report, and I even got to keep a copy, which was nice. In addition to all that, the doctor gave me a prescription for a new and expensive anti-acid medication. I read more about it and it seemed to be top of the line, so I left my doctor's office feeling hopeful about my condition.
I went home knowing for sure that my life was going to have to change. First off, I needed to think about changing what I ate. For example, I was going to have to stop eating bacon with my pancakes. I also needed to limit the amount of alcohol I drank, so that meant I had to avoid my favorite rum and coke. Basically, I knew that I was going to have to stop eating that unhealthy food that we all enjoy so much!

So I started watching what I ate and made some effort to improve my eating habits, but I didn’t change them radically. I didn’t even want to imagine what my future was bringing to me. I realized then how much we take all these things for granted.
What happened next …

despite my best efforts, my chest pains continued. The medication worked to an extent; however, the pains were getting more frequent, more intense, and painful. At night, there were times when I really wanted to cry because the pain was so intense. There was nothing I could do – I couldn’t even move at times, it was so bad. To complicate things a bit more, I took what I’d read had about GERD, and concluded that my pain was probably just the acid reflux getting stronger. I thought to myself, that’s the reason why it hurts so much. So I decided not to see the doctor for another year. Instead, I tried to deal with the pain by controlling it with chilled water, etc. But by then, it was not only chest pain that I experienced, but also some regurgitation and difficulty swallowing. It really felt like food or air got stuck in my middle, and I couldn’t do anything about it but wait a few minutes for the feeling to pass. Let my experience be a lesson for you – Don’t make your own conclusions about your condition. Keep track of your symptoms, and keep in touch with your doctor.

How what was supposed to be a fun trip ended with a diagnosis of achalasia...

to keep this story short, in January of 2002 we were invited back to our home country to attend the wedding of my wife’s sister, so we went. Did I really have a choice? I don’t intend to give you a narration of the wedding, but I do believe it’s important to note that it felt like my last party before achalasia. In retrospect, I am glad the tests and prognosis came after the wedding. That way I was able to abuse a bit on the food, the drinks, the dancing, and the music. Of course, the joy of seeing the family again and spending quality time with them was great as well.

When I had first arrived back home, I had told my family about the GERD diagnosis. They already knew I’d been having some problems, such as pain, difficulty swallowing, etc. So they encouraged me to see a family doctor there at home. They thought that explaining my symptoms and my condition in my own language might be easier. Perhaps I wasn’t able to communicate well enough to the American doctors what I was really feeling.

So I went to see a local doctor there, and he wrote down my entire medical history again. Fortunately, I had brought my collection of test results, x-rays, and endoscopy reports with me. And in addition, I was able to explain it all in my own language. In case you’re wondering, the language thing did not really make a difference. However, the level of care, dedication, and attention I got from that doctor was fantastic. I can honestly tell you that each doctor’s appointment lasted at least an hour, and I got very detailed explanations. The personal touch I enjoyed there is difficult to compare with the medical care I had gotten here in the U.S.

Anyway, this doctor also said that he could not tell much from the outside, so we had to do the endoscopy again to see if there were any changes compared to the previous results, which by then were about two years old. The procedure was the same – they put you to sleep, take pictures inside, and look for problems. Again, I could barely remember the post-procedure conversations I had with the doctor since I was still under the influence of the anesthesia.
Nevertheless, this time the results were a bit different. The doctor told me I did not have GERD. He said he could see an ulcer in my stomach and a lot of acidity in my stomach juices. But that didn’t reflect acid coming into my esophagus. He also noticed when passing the endoscope that he met some resistance before getting to the stomach. He said that made him suspect achalasia. There is an opening in the bottom of your esophagus called the lower esophageal sphincter, also known as the LES. In a healthy person, the LES opens to let food pass through to the stomach. In someone who has achalasia, the LES doesn’t always open as it should.

When my test results came back, the doctor showed me pictures of my ulcer and other things, and then he suggested I have more x-rays and a manometry done. All of these tests would help to confirm his suspicion about achalasia. To complicate matters, the manometry was performed on Friday, and we were returning to the U.S. on Sunday, so I had to rush all the results so I could see the doctor one last time on Saturday for his final words of advice.

To make a long story short, both tests confirmed his diagnosis. My LES was not functioning properly. This meant that the food I ate did not pass to the stomach at an appropriate rate, my esophagus was contracting strongly, and it was a bit dilated. So, I was told that I did have achalasia, which is a rare disease. Wow! What a way to end my vacation!

The next step was figuring out how to get treatment for achalasia...

As soon as I got back to the U.S., I figured my first step should be to set up an appointment with my regular GI doctor, the one that did my endoscopy and told me over a year earlier that I had GERD. Well, when I got on the phone with him and told him I’d been diagnosed with achalasia, he made time to see me as soon as he could, but the appointment was still a few weeks away.

Because I was concerned about my health, I started to read all I could get my hands on about achalasia. Everything I read led me back to the same place – I needed to make a decision about which treatment to pursue.

I pay a high health insurance premium, so I decided that this was a good time to get some of that money back. I began to look for an assertive achalasia expert who could provide me with guidance and the best solution to my medical problem. I was not ready to be handed some half-baked treatment solution, given the fact that I still have some 40-50 years to live! Even with national life expectancy numbers, I still had at least 30 years more. My main
concern was making the wrong choice, cutting corners, or just taking the easiest solution with a temporary fix. No way. I deserved the best, and I was determined to get it!

In the four months after I was diagnosed, I saw my regular GI doctor two more times, as well as three new doctors. My best friend at work, who has hiatus hernia, referred me to his doctor, who he thought was really good. Indeed he was, but he was not an expert in achalasia. However, he did spend an hour talking with me about my case and was very interested in finding out if my achalasia was caused by Chagas Disease, a condition with symptoms similar to those of achalasia. I also consulted with another doctor back in my home country. Finally, I was referred to a GI surgeon.

However, this surgeon did not want to do any surgery without having a GI doctor he trusted confirm the diagnosis. I knew this made sense, but it meant seeing yet another new doctor, and having the tests all over again. So, I saw the last doctor and he did a manometry, a new set of x-rays, swallow tests and blood tests. They did confirm my achalasia diagnosis, but luckily my tests came back negative for Chagas disease.

To tell you the truth, I was looking for an expert in the field who would give me the best recommendation for my case rather than giving me all the options and leaving the decision solely up to me. However, it’s most likely that you will be offered different treatments to choose from. In the end, it’s up to you to decide.

The summary below shows how all my different doctors presented my treatment options to me:

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>First Choice</th>
<th>Second Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor # 1</td>
<td>Dilation</td>
<td>Surgery if dilation does not work</td>
</tr>
<tr>
<td>Doctor # 2</td>
<td>Botox Injections</td>
<td>Dilation/surgery if multiple Botox treatments did not work</td>
</tr>
<tr>
<td>Doctor # 3</td>
<td>Surgery</td>
<td>Explore dilation</td>
</tr>
<tr>
<td>My decision</td>
<td>Surgery</td>
<td></td>
</tr>
</tbody>
</table>

An achalasia treatment decision flow chart

1. Symptoms
2. Diagnosis
3. Satisfied with solution approach?
   - Yes: Agree on most appropriate treatment
   - No: Check with other doctors, perform additional research
4. No: Get well!
To sum it all up …

In the past three years, I had gone through many tests, including:

- two endoscopies
- two manometries
- three x-ray and swallow tests
- a couple of electrocardiograms
- blood work at least two times

All this was leading up to my final decision of surgery. I really hoped that after all this work, I would have a successful surgery. My goal was to go back to feeling “normal.” But more importantly, I wanted to maximize my life expectancy. Believe me – I’m looking forward to the day when I can have a rum and coke and some chicken wings with blue cheese dip again! I don’t think this is just a dream … I’m confident that it won’t take too long to claim victory and go out to celebrate!

In the next few sections of this book, you’ll see how my story is very much the typical achalasia story…
Part 2: All About Achalasia
What is achalasia?

Achalasia was first detected more than 300 years ago. At first, it was called *cardiospasm* because doctors realized it was linked to a blockage in the cardiac sphincter (LES) of the esophagus. In the first half of the twentieth century, experts renamed the disease *achalasia*. Technically, this term means “failure to relax,” and refers to the fact that the LES in the esophagus is not able to relax as it should.

On his web page about achalasia, Dr. Arnon Lambroza offers this definition:

*Achalasia is an esophageal motility disorder, which is characterized by delayed food passage through the esophagus. Patients with achalasia feel that food gets stuck in their throat or chest and may experience severe regurgitation and weight loss. With achalasia, the esophagus loses its ability to contract in a sequential manner and the lower esophageal sphincter fails to open completely, thereby slowing food transit into the stomach.*

In other words, the two main problems causing the symptoms of achalasia are:

- The esophagus doesn’t move food steadily along through the throat into the stomach.
- The sphincter, or valve, between the esophagus and the stomach doesn’t relax with swallowing as it is supposed to.

So the food not only moves more slowly down the throat, but once it gets to the stomach, it can’t get in. This results in food backing up in the esophagus.

What causes achalasia?

No one is really sure what causes achalasia, but doctors do know that it’s related to damage of the nerves in the wall of the esophagus. Some possible causes might include:

- herpes zoster, also known as shingles
- some type of infection
- hereditary factors
- cancer
- autoimmune disease

Achalasia is equally common among men and women. It can occur at any age, but is most common in adults between the ages of 25 and 60.
Common symptoms

Difficulty swallowing both solids and liquids is the most common symptom of achalasia. In fact, this symptom alone – called dysphagia – often leads the doctor to suspect achalasia and order more tests. At first, dysphagia isn’t severe and doesn’t occur that often, but it tends to become worse and worse over time. Most people describe dysphagia as a feeling of fullness. The difficulty swallowing is more pronounced with solid food, so patients often start to avoid meats, leafy vegetables, pasta, breads, and liquids.

Other symptoms of achalasia can include the following:

- **Chest pain.** This pain is really more of a spasm, and it gets worse after eating, as opposed to angina, a heart-related chest pain, which tends to get worse with exercise or exertion.

- **Regurgitation.** This occurs when food or liquid backs up, or gets caught in, the throat. You may even feel like you have to spit it out rather than keep trying to swallow. Excess saliva, which may even appear to be a thick, white foam, may also back up. This symptom is most common when lying down, especially at night.

- **Heartburn.** This symptom is caused not by gastric acid from the stomach (as in GERD), but instead by lactic acid, which comes from the breakdown of food caught in the esophagus.

- **Weight loss.** Most achalasia patients have some degree of weight loss, but it may not be severe.

People with achalasia often find ways to help with the dysphagia when eating. They may drink a lot while eating (in the early stages). Or, they may try things such as raising their arms over their heads, standing or jumping to get the food to go down their throats. Some people find that drinking carbonated drinks helps.

Please keep in mind that the most common symptoms of Gastroesophageal Reflux Disease “GERD” are:

- **Heartburn.**
- **Regurgitation**
- **Difficult or painful swallowing**
- **Chest pain**
Part 3: Diagnosis and Treatment
How is achalasia diagnosed?

Achalasia can be hard to diagnose because the symptoms come on so gradually. Often, the symptoms are so subtle at first, the person hardly notices them. Once a person is having dysphagia with both solids and liquids, the doctor should suspect achalasia. However, testing will be needed to confirm the diagnosis and to rule out other possible causes of the symptoms.

Types of Tests Used to Diagnose Achalasia

Most people with achalasia symptoms start out by having an upper GI series, also called a barium swallow. In this test, a type of dye is swallowed, and then an x-ray is done. The dye helps the doctor to see the esophagus and upper digestive tract clearly. If you have achalasia, the doctor will see a narrowing of your esophagus leading into the LES. Sometimes your esophagus will also appear to be stretched out.

Other early tests may include:

- chest x-ray
- electrocardiogram, also called an EKG, if you have chest pain
- blood work, to rule out Chagas disease, which is caused by a parasite, or other conditions

Esophageal manometry is the best test to confirm the achalasia diagnosis. This test of the esophageal muscle measures the pressure in the esophagus. To do this test, the doctor passes a tiny, pressure-sensitive tube through your nose or your mouth into your esophagus. Once there, it measures muscle contractions as you swallow. The test takes less than 1 hour. The two signs that can be detected through this test and that prove that you have achalasia are:

- aperistalsis, which means the muscle in your esophagus does not contract and relax as it should
- an LES that cannot relax completely
- high pressure in your LES, even at rest

Endoscopy should always be used as a follow-up to ensure some other condition, such as cancer, is not causing symptoms that mimic achalasia. With this test, the doctor passes a narrow tube down your throat. A light at the end of the tube helps him see inside your esophagus.
What are my treatment options?

Once you know you have achalasia, you and your doctor will have to choose the best treatment for you. The main goal of treatment is to reduce the pressure at the LES, so that it relaxes better. There are basically three types of treatment:

- **Medical**, which involves using medicine to relax the LES, including Botox Injections
- **Mechanical**, in which the doctor uses a balloon to dilate the LES
- **Surgery**, such as laparoscopic esophageal myotomy

None of these procedures, whether medical, mechanical, or surgical, is intended to relax the LES. None of them has any effect on the normal muscular function of the main esophagus or on the propagation of food and liquids in the esophagus.

Which treatment you and your doctor choose will be based on factors such as your age, your overall health, and your own personal choice. Surgery used to be risky, but is now considered the treatment of choice for most people. The chart below can give you an idea how the choices are made. Many people will try one or more of the different treatments at various times during their illness.

### Medical Treatments

The newest medical treatment is to inject Botulinum toxin, also known as Botox, through an endoscope into the LES. This works well to reduce the pressure in the LES in about 85% of the people who get it. However, in over half of those people, this effect only lasts for about 6 months. A second injection can be done, but people usually get less of a response the second time around. This can be a good choice for older people or others who cannot have surgery safely.
Other medicines that have been used to reduce LES pressure include:

- **Botox** injections (botulinum serum)
- calcium channel blockers
- long acting nitrates

Although those medicines may provide short term, partial relief of dysphagia, they usually stop working as well over time.

**Mechanical Treatment (Balloon Dilation)**

A gastroenterologist can do an outpatient procedure called pneumatic dilation. In this treatment, a guide wire is passed into the stomach with the aid of an endoscope. After the endoscope is removed, a pneumatic balloon is passed over the guide wire, half above and half below the LES. The balloon is then rapidly inflated for 30-60 seconds, expanding the circular muscles around the diaphragm, causing them to rupture slightly. This partially tears the muscle and dilates the LES by force. However, there is a risk (5-8%) of puncturing the esophagus with this procedure. Any perforation of that sort will require surgery to repair it. Pneumatic dilation provides relief from symptoms in 7 or 8 out of every 10 people who have it done, although these positive effects may not last. In fact, about half of the people who have this done will need to repeat it within 2 to 5 years. And every time it is repeated, its effectiveness drops about 50%. Another problem with this procedure is that the inflation of the balloon can be extremely painful.

**Surgical Treatment**

**H**eller Laparoscopic Myotomy is the preferred surgical treatment for achalasia at present. The reasons why this has become the best treatment for most people include:

- excellent results – it relieves symptoms in 85 to 95% of patients
- short hospital stay of only 1 to 2 days
- quick recovery time, with a return to regular activities within 2 weeks

The surgery is considered minimally invasive since they only make five small incisions in your abdomen. In the past, the surgery was more on the level of open-heart surgery. If the laparoscopic surgery gets complicated, the surgeon may opt to do more invasive surgery. However, although this could happen, it’s not likely. When you schedule your surgery, ask your GI surgeon if there will be a cardiac surgeon available, in case of emergency.

During the procedure, you are put under general anesthesia. Five small incisions are made on the abdominal wall, and a laparoscope is inserted into the area around the stomach. Meanwhile, an
endoscope is inserted to help the surgeon see what is happening from above. After the lower end of the esophagus is found and moved into position, the muscular ring surrounding the LES is cut. This allows it to open more easily. The surgeon also uses the endoscope to evaluate the length and adequacy of the myotomy and to search for any perforation of the esophageal wall.

During this procedure, the surgeon may also repair a hiatal hernia, if one exists. More importantly, the surgeon often does a partial fundoplication, which is a procedure that can prevent future reflux. This procedure is also called a wrap. The surgeon wraps the left upper part of the stomach behind the esophagus and attaches it to the right and left sides of the esophagus. Combining myotomy with a wrap not only eliminates the symptoms of achalasia, it can also prevent you from getting GERD in the future.

Possible complications

In some cases while performing the surgery, the esophagus may be torn. It is recommended that an expert in myotomy surgery do this procedure since experience plays a big role in its success. An expert will know where, how, and how deep he or she needs to make the incision.

In some cases if a wrap is performed too tight, an obstruction at the esophagogastric junction may lead to a swallowing disorder similar to achalasia.

If the wrap is not performed, then regurgitation of acid or food from the stomach up into the esophagus may occur because of an incompetent LES. This is called GERD, which stands for gastroesophageal reflux.
Here is a checklist that I recommend you complete if you decide to pursue surgery:

**Before surgery, find out …**

- Agree with your Achalasia specialist about the best treatment for you
- Meet the surgeon who will perform the surgery
- Obtain details about pre- and post-surgery care from your doctor and surgeon
- Obtain a list of things you should bring to the hospital
- Obtain a specific diagnosis from your doctor. In some cases, they will start the paperwork with the hospital.
- Check with your insurance company to see what must be paid out of pocket and how much your deductibles are. In some cases, you may need to receive a pre-admission approval.
- Check with your insurance company to find out your specific coverage details, for example: private vs. semi-private room, number of nights you’re allowed to stay in the hospital for this procedure, etc.
- To make a decision, list the benefits and risks of each treatment option, as outlined by your doctor
- Check with your Human Resources representative at work to find out what you need to do, for example, apply for disability, etc.
- Ask your employer about long-term disability; your employer may need to file paperwork with the local governing bodies
- Start compiling recipes for your recovery time. Remember that you will have to introduce solids progressively from liquids to solids, so stock up on Ensure or other supplements that you can take during the first few days after surgery
- Although you can move around after surgery, find out from your doctor if you’ll need any kind of special care or assistance
- Ask your surgeon how long the surgery is expected to take, so you can tell your loved ones what to anticipate (my surgery lasted about 3 hours)
After surgery, expect …

- 3-hour recuperation after surgery
- Expect to urinate within 12 hours of surgery
- Expect 2 days of nothing but liquids, or some sort of restricted diet. You will not feel like eating a 20-ounce steak; trust me you want to give your esophagus a break!
- Get ready for a short stay in the hospital (I stayed two nights/2 days)
- Expect to have an IV for 1-2 days after your surgery

**Back at home:** take it easy on the stairs, lifting, etc. Use common sense – after all, you just had surgery!
- You’re not going to enjoy the first 3-4 days at home; you will experience some pain, etc.
- You may need to take a lung exerciser, also called an incentive spirometer. If so, practice, practice, practice! It will help you recover more quickly.
- Check with your surgeon about medication. You’ll need to know if there is any you should be taking as follow up to the surgery, for example, pain medicine. (I took pain medication, but stopped it after the first few days since it made me lightheaded.) Also, ask your doctor if it’s OK to resume taking any other medicine you were taking before the surgery for another condition. And check to see if it’s OK before you take any vitamins or herbal supplements.
- Don’t worry if you don’t have a bowel movement for a few days. Remember that after surgery you are mainly on liquids or mashed foods. If you become uncomfortable, talk with your doctor.
- Expect to stay home for a couple of weeks to recuperate (I stayed home for 2 weeks)
- **Back to work:** take your time to recuperate. You’d better believe that once you get back to work you will start your normal routines without the option to sit down, rest, eat a balanced diet, etc.!
What happens if I decide not to get treatment?

If you decide not to get treatment, it can lead to a number of problems, including:

- **Weight loss and malnutrition**: This can result from not being able to eat properly.

- **Aspiration pneumonia**: This is a lung infection that comes from breathing in regurgitated food, saliva, liquids, or gastric acids. It occurs most often when lying down.

- **Cancer**: This can result from tissue damage due to constant acid reflux and scarring. Achalasia increases the risk for esophageal cancer ten times compared to a healthy person.

- **Esophageal distention and enlargement**: The esophagus becomes wider when food backs up because it is unable to pass into the stomach at the right pace. This makes the tissue softer and more difficult to treat.

- **Food retention**: When food stays in the esophagus too long, it may decompose, breaking down into waste products such as lactic acid. This can cause damage to both the GI tract and the lungs.

Finding the right doctor

No matter what type of treatment you choose, it is important that you find the right doctor for you and for your condition. You need to feel comfortable with the doctor, and you need to have confidence in his or her skill in treating you.

If you don’t have a doctor in mind when you start out, you’ll need to find one. In smaller communities, it may be fairly easy to find a few doctors who have established good reputations. In larger cities, there will likely be a larger selection, but narrowing the field may be harder. When you choose any specialist, ask for referrals from people you know and trust. Here are some people who may give you referrals.

- **Your doctor**. Ask your doctor or other healthcare provider for names of therapists he or she respects with expertise in the field of Achalasia.

- **Your current family doctor or GI specialist**. This is the most
The most common place to get a referral.

- **Friends and family.** Talk with people whose opinion you value and ask them for referrals.

- **Coworkers.** People at work may know of a doctor you can contact. If your company has an employee assistance program, called an EAP, your employee assistance representative may also be able to offer referrals.

- **The Internet.** There are many ways to find a doctor today by searching on the Internet.

- **Local medical societies.** If you can't find a personal referral, call a local medical society and ask for names of gastrointestinal surgeons.

This checklist can help you think about some key issues when choosing a doctor.

- Do you prefer a male or female doctor?
- Do you want a doctor who has a lot of training and experience in working with achalasia?
- Do you want a doctor with a good reputation?
- Do you want a doctor who's willing to work with your primary care doctor?
- Do you need a doctor who is covered by your health plan?
- Is your doctor's educational background important to you?

Once you've got the names of a few doctors and you've thought about what's important to you, you'll need to do a bit more research. Don't be afraid to ask a lot of questions. You may be able to talk with the doctors first over the telephone. Many doctors will be willing to spend a few minutes on the phone discussing your problem and their practice. During this time, you can get a feel for whether this is someone with whom you could work. Make sure you follow these steps:

1. **Check the doctor's credentials.** Find out if the doctor you're considering really has experience and training in treating achalasia. Not all GI surgeons do, because it's such a rare disease.

2. **Find out about their fees.** Some doctors may offer a "sliding scale" if you don't have health insurance, which means that the cost for an appointment is based on your income. If you have limited times that you could meet with a doctor, you may want to ask about their office hours.

3. **Compare your feelings about the doctor to your key issues checklist (see above).** Ask yourself: Does this doctor seem interested in me and my medical condition? Do I feel a sense of confidence and hopefulness about this doctor?
In some cases, achalasia is diagnosed at an early or late age, or it may be also be accompanied by other medical conditions. Treatment options may be different with these special conditions.

- Achalasia at an early age
- Achalasia on the elderly
- Lactose intolerance
- Heart Problems
- Overweight
- Distended esophagus
Part 4: Learning to Live With Achalasia
Impact on lifestyle, family and friends

Living with the symptoms of achalasia can be a challenge. It requires that you make many changes to your lifestyle, and can have an effect on your family and friends, as well as you. In this section, I’ve included some practical tips that I have found to be helpful to me.

Living With the Pain

The pain from the spasms is difficult to describe, but can be severe. In some instances, you may want to cry due to the intensity. Some people say it feels like burning, pinching, and tearing apart. You can start managing the pain with chilled water, ice chips, or just by trying to relax and let the pain go away. When you are in public, with friends, or at work, sometimes it is impossible to hide the pain. You may turn pale. I recommend you carry a bottle of water everywhere you go, just in case, which may help about 30 to 50% of the time. Don’t forget to consult with your doctor if you need medication to control your level of pain.

Changing Your Eating Habits

Your old eating practices may have to change. After I was diagnosed, I started to pay attention to everything I ate or drank. I started eating slower, moving around while eating, standing up, lifting my arms, you name it. Little by little, you’ll learn more tricks that at least make you feel a little better some of the time.

Eating out becomes a challenge. I remember when my friends would ask, “Are you OK?” My discomfort was obvious to them – I would get that frozen look on my face that revealed my pain, started sweating – it was hard to hide what was happening. But if you work at coping with the pain and the discomfort, watch what you eat, chew your food well, and drink enough fluids, achalasia can become only an inconvenience. And it should not stop you from eating out.

Up to a point, Achalasia should be only an inconvenience to you. However, when the symptoms increase it becomes frustrating, painful, and you just want to get rid of it. In my case, I can tell you than in the last six months I’d had it and wanted to have my surgery done as soon as possible.

When I was diagnosed, the doctor mentioned the possibility of food aspiration. I believe the risk increases in advanced cases where the esophagus is significantly dilated. Therefore, I started waiting to go to bed at least two hours after I had dinner. In addition, I tried sleeping in a semi sitting-up position rather than lying flat on the bed. But this made it hard for me to sleep, and I started to have back pain. Experts say that in some cases sleeping with extra pillows may not be a good idea, since it can add pressure to certain areas of the stomach or esophagus. The next thing I tried was to raise the mattress with a pillow. This seems to have helped, but still I had to make a few trips to the chiropractor and to my favorite massage therapist!
Coping With Regurgitation

A difficult symptom to distinguish is regurgitation. I did not understand the difference between regurgitation and simply throwing up at first. Regurgitation is when undigested food that has not made it to your stomach backs up into your throat. If you are alone, you can manage this by just spitting the food out into the garbage can next to you. But if you are with others or in a restaurant, you may need to excuse yourself and look for the closest restroom. I did not have this for the first 2 years, but once it started, it seemed like every time I really wanted to take a big bite of my favorite food, I got regurgitation.

Dealing With “White Foam”

White foam filling my mouth was another symptom I developed. It seems that there is a lot of saliva retained in the esophagus when you have achalasia, and since the LES is closed and the muscular activity of the esophagus is diminished, the saliva backs up. This symptom is no fun – trust me!

I cannot recommend any practical solutions to this symptom. One thing I can point out is that certain juices gave me more problems, specifically apple juice, so you may want to avoid those things you know will cause you problems.
Part 5: More Information for Your Reference
Achalasia Facts at a Glance

- Only 1 out of every 100,000 people in the U.S. has achalasia.
- It can occur at any age.
- Chagas disease causes a similar disorder, and is common in South America.
- An equal number of men and women have achalasia.
- Experts are not sure what causes achalasia. Possible causes and risks include:
  - Genetic/ hereditary factors
  - Chagas Disease
  - Tumors
  - Aging
  - Stress
  - Poor eating habits
  - Degeneration of the nerves around the esophagus
  - Past viral infections, such as herpes or measles
- 70 to 97% of people have difficulty swallowing both solids and liquids by the time they’re diagnosed.
- Three-quarters of people who have achalasia have regurgitation of food, liquids, or saliva.
- About 4 out of 10 people have chest pain or discomfort.
- Around 60% of people with achalasia have some weight loss.
- Even with an endoscopy, achalasia is an easily missed-diagnosis.
- Manometry is the best exam a doctor can use to confirm achalasia.
- The damage done to the body by achalasia cannot be reversed with treatment.
- Instead, treatment focuses on reducing LES pressure.
- Treatment can be medical or surgical. Age, overall health, and personal choice influence the decision.
- Having achalasia makes it 10 times more likely that you will develop esophageal cancer.
Commonly used terms

**Achalasia**: an abnormal condition, where the sphincter, or opening, in the lower end of the esophagus is unable to relax

**Biopsy**: removal of a small piece of tissue from a part of the body to examine it under a microscope to help with diagnosing disease (often used to rule out cancer)

**Bird beak**: the shape of the esophagus when the LES is closed due to achalasia

**Blood work**: laboratory tests done on a sample of blood drawn from a vein in your arm; tests vary

**Botox**: one form of treatment for achalasia, involving injection of botulinum serum

**Chagas Disease**: a disease with similar symptoms to achalasia that is caused by a parasite, and that is most common in South America

**Chest Pains/Thoracic pain**: what is commonly referred to as chest pain is related to lack of oxygen in the heart; this type of pain is usually described as crushing and may radiate down the left arm; thoracic pain, which is related to achalasia, is more of a burning pain

**Dysphagia**: difficulty in swallowing

**Endoscopy**: an exam where a doctor looks into your throat, esophagus, and upper stomach, using an instrument called an endoscope

**Fundoplication (wrap)**: surgery where tucks are made in the stomach at the point where the lower esophagus connects; this is done to prevent gastric acid reflux into the esophagus

**GI**: Gastrointestinal

**Intravenous, or IV**: tubing that is inserted into a vein (usually in your arm or hand) so that fluids can be injected into your bloodstream

**LES**: Lower Esophageal Sphincter; refers to the opening at the lower end of the esophagus

**Manometry**: a technique for measuring changes in the pressure within the esophagus

**Motility**: ability to move, for example the motility of the esophagus is its ability to move food down toward the stomach in waves of muscle contractions

**Pneumatic dilation**: a method for dilating the esophagus
**Regurgitation:** the backward flow of swallowed food into the mouth

**Upper GI:** an x-ray of the upper gastrointestinal tract, done after swallowing a white dye called barium; another name is barium swallow

**X-rays:** a picture made by projecting x-rays through parts of the body onto a photographic film
**My Achalasia Resources**

**Physicians**

Dr. Dennis Fowler, Director of Laparoscopic Department – NY Presbyterian Hospital

Dr. Arnon Lambroza

Dr. Javier Villota

**Web Sites and specialized links**

**Yahoo.com** – Achalasia Group / Acalasia Group

**A Healthy Me - Achalasia**
General achalasia information. States achalasia suspected cause to be autoimmune disease or hidden infection.
http://www.ahealthyme.com/topic/topic100586383

**ACP-ASIM Annals of Internal Medicine - Treatment with Botulinum Toxin**
An article describing a trial of treatment of Achalasia with Botulinum Toxin. Results of trial described.
http://www.acponline.org/journals/annals/15oct94/achalasia.htm

**APC Journal Club - Intrasphincteric injection of botulinum toxin was effective for achalasia**
Paper on effectiveness of botulinum toxin injections.

**Abnormal Cardiovascular Reflexes**
Study in China on cardiovascular reflexes - found achalasia sufferers had abnormal vagal function
http://go6.163.com/gef/Articles/ABNORMAL%20CARDIOVASCULAR%20REFLEXES%20IN%20THE%20PATIENTS%20WITH%20ACHALASIA.htm

**AboutDigestion.com - Achalasia pages**
General Achalasia information
http://www.aboutdigestion.com/script/main/Art.asp?li=DIG&ArticleKey=8104

**Achalasia from The Doctor's Doctor**
Achalasia info including abstracts of articles
http://www.thedoctorsdoctor.com/diseases2/achalasia.htm

**Achalasia**
General Achalasia info from Hendrick Health System
http://www.ehendrick.org/healthy/00035860.html

**Achalasia (Megaesophagus) in the German Shepherd Dog**
Some animals apparently share this condition, whether or not the cause is the same, I don't know. Interesting.
Achalasia - to Inject, Dilate or Cut? - Presentation
Cool presentation on Achalasia cases and treatment. Includes Audio of presentation along with slides. Check this out!
http://www.ddc.musc.edu/ddc_pro/pro_development/case_studies/case042_files/frame.htm

Achalasia Barium Swallow photos
Photos showing Achalasia Barium Swallow x-rays
http://radiology.uchc.edu/Esophageal%20Tutorial/Tutorial%20Files/frame59a.htm

Achalasia Cardia - from EESEE Health, India
General achalasia information from India site.

Achalasia Concepts in Surgical Management
Achalasia info from a symposium. Link to an audio interview as well as some treatment statistics.
http://www.cybercable.tm.fr/~biblioa/aga99_waring.html

Achalasia Presentation - Chest Surgery, CGMH Basic Teaching
A power point presentation in English (mostly) from Chinese source. Most of the info is pretty standard but in a power point presentation. Four unreadable links on left side contain slow loading graphics but very interesting graphics, including drawings of dilation and surgery, x-rays, etc.

Achalasia and Related Misdiagnoses by Dr O. Arthur Steinnon
A bit controversial among our group, Dr Steinnon, a very experienced radiologist, speculates that there is no such thing as Achalasia as it is defined, and that the cause of our symptoms is structural rather than nerve. Well worth a look if you can get through the medical jargon. The index page of the site is:
http://www.inxpress.net/~oastiennon/index.html
http://www.inxpress.net/~oastiennon/webdoc1.htm

Achalasia from Advanced Surgical Associates
General achalasia info from a surgical practice site.

Achalasia in Children by Prof G Veerman-Wauters (Belgium)
Information about children with achalasia. Some info on adults to use as comparison with child cases.
http://www.med.ege.edu.tr/~pedsurg/weereman.htm

Achalasia info from eCureMe.com
General achalasia presented well
http://www.ecureme.com/emyhealth/data/Achalasia.asp

Achalasia information from Tummyhealth.com
General information on testing and treatments.
http://www.tummyhealth.com/achalasia.htm

Achalasia photos and information
Photos and information on achalasia. Not a lot there but some case study photos.
http://www.mindspring.com/~atlsouthgastro/es_ge_09.html

Achalasia site by Jim Garza, MD
**This is a very detailed site - the whole site is on Achalasia. Great information and very well presented. Dr
Garza appears to be extremely experienced (for those looking for a doctor - think he's in Texas)
http://www.achalasiasurgery.com/

All About Achalasia
Information about Achalasia, including a comprehensive definition and description of various treatment options currently available.
http://donn.lbl.gov/achalasia

Allgrove's Syndrome - Achalasia, alacrima, adrenal insufficiency
Medical paper on Allgrove syndrome without the adrenal insufficiency

American Journal of Gastroenterology - Botulinum Toxin Injections for Achalasia Symptoms
An editorial about a piece in the journal on use of Botulinum Toxin. The editorial recommends against use of it in many cases due to potential complications with possible future myotomy. The original article referenced may promote use of the injections.
http://www-east.elsevier.com/ajg/issues/9402/ajg840edi.htm

American Journal of Gastroenterology - Diagnosis and Management of Achalasia
December 1999 article in AJG - lists poss. causes as hereditary, degenerative, autoimmune, and infectious factors. Study of patient success with dilation and a treatment decision tree for achalasia. Geared at the GI Physician reader but understandable and interesting.
http://www-east.elsevier.com/ajg/issues/9412/ajg1639fla.htm

Bert's Achalasia Story
Someone with achalasia's personal web page.
http://members.aol.com/_ht_a/kma650/myhomepage/

Botulism toxin was less efficacious than pneumatic dilation for achalasia
Journal article summary
http://www.acpjc.org/Content/131/1/ISSUE/ACPJC-1999-131-1-017.htm

Brigham & Women's Hospital - Patient Education - Achalasia
General achalasia info from Brigham and Women's hospital. Interestingly this site states the incidence of achalasia is more common in men than in women.
http://www.brighamandwomens.org/generalsurg/diagnosis/achalasia.asp

Canadian Medical Association - Article on Laparoscopic cardiomyotomy with Dor fundoplication
Study results presented in journal abstract from 1995
http://www.cma.ca/cma/common/displayPage.do?pageId=/staticContent/HTML/N0/l2/cjs/vol-38/0445e.htm

Cardiac achalasia (video)
A video of a barium swallow in .mov format.
http://www.szote.u-szeged.hu/radio/videok/avideo2.htm

CliniWeb Esophageal Motility Disorders
Links to a lot of Achalasia sites.

Controversias en Gastroenterologia
Article in Spanish entitled: Algoritmo terapéutico actual en la achalasia del cardias (Present therapeutic algorithm in achalasia of the cardia)
Diagnosis and management of Achalasia

Diseases of the Esophagus - Blackwell Publishing
List of articles on Diseases of the Esophagus, including Achalasia. Abstracts free, reprints or downloads cost money.

Divers Alert Network - Question about diving and Achalasia
Recommends against achalasia sufferers scuba diving - bummer!

Dr Koop on Achalasia
Dr Koop's site info on Achalasia - general information.
http://www.drkoop.com/conditions/ency/article/000267.htm

Dr Lockie Homeopathy site - page on Achalasia treatment.
Interesting - homeopathic site with their treatment information for Achalasia.
http://www.drlockie.com/disease/achala.htm

Dysphagia Resource Center
Resources for swallowing and swallowing disorders.
http://www.dysphagia.com/

E-Medicine Achalasia Article
Geared for medical community - lots of detail and some photos. Good site.

ESOPHAGUS PHYSIOLOGY, HIATAL HERNIA, REFLUX ESOPHAGITIS, ACHALASIA, AND
Outline of a Medical School lecture given in 1998 by Dr Mark Ferguson at Univ of Chicago
http://surgery.uchicago.edu/ed/HTMLs/EsophagusPhysiology.htm

Esophageal Disorders
Lots on esophageal disorders, diagnosing chart for symptoms - very good.
http://jeffline.tju.edu/CWIS/DEPT/GI/education/pdfs/esophagus.pdf

Esophageal Function Testing for Gastroesophageal Reflux Disease and Achalasia
Course Presented by UC-San Francisco departments of Surgery and Gastroenterology in 2000. No details beyond the course agenda. Cool that they had a whole course on it, though.
http://www.som.ucsf.edu/som/education/cme/cal/esophogal_function/ef_brochure.pdf

Esophageal Tutorial - Achalasia - UCHC
Tutorial on Achalasia from Univ Connecticut Health Center - slides showing x-rays. Geared toward medical audience.
http://radiology.uchc.edu/Esophageal%20Tutorial/Tutorial%20Files/achalasiaovr.htm

Esophageal tone in patients with total aperistalsis: astrosphageal reflux disease versus achalasia
Abstract of paper from Spain on achalasia and GERD regarding peristalsis
http://www.uth.tmc.edu/apstracts/2000/gastro/August/142g.html
Esophagus - general information from MUSChealth.com
General info on the esophagus including anatomy, function and control, and dysfunction. Lists achalasia as one of the dysfunctions.
http://www.muschealth.com/ddc/organ/esop.htm

Family Inheritance paper on achalasia
Study on incidence of achalasia among family members. Includes references and links to other studies.

Family Practice Notebook - Achalasia
General Achalasia Info.
http://www.fpnotebook.com/GI24.htm

First Principals of Gastroenterology - Ch 10 Motor Disorders of the Esophagus and LES
Online book on Gastroenterology. Chapter 10 contains info on motility disorders including Achalasia.
http://gastroresource.com/GITextbook/En/Chapter5/5-10.htm

GI Health Achalasia - Three Rivers Endoscopy Center
Very well written overview of achalasia! This one is very descriptive and sympathetic about the symptoms of achalasia - a good one to pass onto friends and family to educate them on the disease.

GI Pathology from "The Pathology Guy"
Unprofessional-looking but contains a lot of info on GI disorder pathology, including achalasia.
http://members.tripod.com/danil_hammoudi/gipathology/id17.htm

Gale Encyclopedia of Medicine
An article on achalasia giving suspected cause as infection or autoimmune. Otherwise standard fare on achalasia.
http://www.findarticles.com/cf_dls/g2601/0000/2601000007/p1/article.jhtml

Gastroenterology Therapy Online
Case Presentation Answers in Education section. Also see
http://www.gastrotherapy.com/education/cme/t030107.asp
http://www.gastrotherapy.com/education/cme/050103.asp and
http://www.gastrotherapy.com/education/cme/050101.asp
http://www.gastrotherapy.com/education/cme/t030108.asp

Gastrolab images of Achalasia
Upper GI shots of a patient with Achalasia - multiple views over time - can see the changes of the esophagus.
http://www.gastrolab.net/ng015.htm

Having Difficulty Swallowing? Learn about "Achalasia"
Personal MD site info on Achalasia. Very General overview.

Health Network - Australian and New Zealand Health Info - Achalasia
General overview on Achalasia from Australia/NewZealand source.
HealthCentral - Encyclopedia - Achalasia
General Achalasia Info from adam.com
http://www.healthcentral.com/mhc/top/000267.cfm

HealthSeek Support Group Forum
A web board for health issues. Achalasia has come up a number of times in the past year or two and has some fairly long threads.
http://www.healthseek.com/forums/support/

Heller Myotomy
Very detailed and in-depth information on the Heller myotomy directed at medical audience. Down to laparoscopic camera placement, layout of the operating room, etc.
http://www.wfubmc.edu/surg-sci/atlas/heller1.htm

Heller's Myotomy for Achalasia: Is an Added Anti-Reflux Procedure Necessary? - Abstract
Abstract of article on myotomy and anti reflux procedure
http://www.gerd.com/articles/abstracts/181.htm

Info on Achalasia
General info on Achalasia from University of Louisville in Kentucky.
http://www.ulgi.com/Achalasia.htm

InteliHealth Achalasia
InteliHealth's site on Achalasia - basic and general. Nothing new.
http://www.intelihealth.com/IH/IhtH/WSIW000/9339/9405.html

Johns Hopkins - General Achalasia information
Nice pages on achalasia. QuickTime video of barium swallow, x-rays, photos, diagrams, etc. Nicely laid out and pretty site.
http://hopkins-gi.org/pages/latin/templates/?pg=disease3&organ=1&disease=37&pagetype=8&pagenum=602&lang_id=1

Laparoscopic Heller Myotomy and Anterior Fundoplication for Achalasia Results...
A paper on the results of the laparoscopic Heller Myotomy.

Laparoscopic Surgery for Achalasia
Information on Achalasia generally and on the myotomy in particular from Dr Ali at Univ of Missouri Kansas City, School of Medicine.
http://www.mylapsurgeon.com/Achalasia.htm

Laparoscopic Surgical Center of New York - Achalasia
Overview of achalasia and surgery from a New York surgical practice. Information directed toward patients.

Laparoscopy.com
Esophageal Myotomy - info on myotomy surgery by Dr Cuschieri. Lots of medical photos of the procedure.
http://www.laparoscopy.com/pictures/myotomy.html

MedHelp Achalasia
http://www.medhelp.org/forums/gastro/archive/6244.html
Medical College of Wisconsin
Not much here but may be worth a look. Directed toward medical community.
http://chorus.rad.mcw.edu/doc/00003.html

Medical University of South Carolina - Diseases: Esophagus Achalasia
General info on achalasia.
http://www.ddc.musc.edu/ddc_pub/digestiveProbs/diseases/esophagus/achalasia.htm

MedicineNet Achalasia
General info on Achalasia and tests and treatments. Links to "ask the doctor" type questions on achalasia.
http://www.medicinenet.com/Script/Main/Art.asp?li=DEP&ArticleKey=8104

Medline Plus Achalasia Information
Brief general achalasia overview - general fare

Merck Manual (pharmaceutical company) on Esophageal Disorders - Achalasia
Information from Merck Pharmaceuticals on achalasia and the drug treatments used for dysphagia and esophageal spasm.

Minimally Invasive Surgery - Cleveland Clinic Florida
Description of lap myotomy. Includes lots of nice diagrams of the surgery. See also
http://www.clevelandclinic.org/misc/surgical/general/achalasia.htm for additional info
http://www.clevelandclinic.org/florida/depts/mis/swallow.htm

MoMac Gallery - Achalasia pages
Detailed experience of someone's achalasia testing and diagnosis experience - includes lots of photos.
http://personal.cfw.com/~jeffmo/gallery/achalasia1.html

My Lifeguard for Health - Achalasia
General info on achalasia.
http://www.mylifeguardforhealth.com/topic/topic100586383

New York Dr Ferzli bulletin
Bulletin - issue dedicated to laparoscopy for Achalasia
http://www.drrferzli.com/bulletins/lapbull3.htm

Nurse Minerva - UK - Swallowing problems
Questions about achalasia answered by Nurse Minerva site, which has actual nurses who answer questions.
http://www.nurseminerva.co.uk/swallowi.htm

Online laparoscopic Technical Manual
Technical info on the laparoscopic technique - geared toward medical community.
http://www.laparoscopy.net/acha.htm

Pages on Achalasia in French Language.
In French, one could use a translating site to translate these pages. They look like info geared toward a medical audience. There are links to x-rays that look interesting.
http://www.med.univ-rennes1.fr/erlf/erlfoncerfi/idx/tous/ACHALASIA.html
Pathophysiology and etiology of Achalasia from UpToDate
By Stuart Sprecher, MD, a paper with references on achalasia.
http://www.uptodate.com/patient_info/topicpages/topics/6707E5.asp

Patient Care Guidelines from SSAT - in Spanish
Spanish version of SSAT achalasia info. English link posted here also.
http://www.ssat.com/guidelines/achalasiasp.htm

Patient Care Guidelines from the Society for Surgery of the Alimentary Tract
Symptoms, treatment, risks, surgeon qualifications
http://www.ssat.com/guidelines/achalasia.htm

Pneumatic Achalasia Dilators
Like we wanted to know - info on the instrument your doctor may be using to do a balloon dilation on you.
http://www.endo-flex.de/Welcome/Products/Pneumatic_Achalasia_Dilators/pneumatic_achalasia_dilators.html

Pneumatic Dilation In Achalasia from Canadian Journal of Gastroenterology
Abstract of paper on pneumatic dilation. Must pay for full paper though.
http://www.pulsus.com/Gastro/15_03/bitt_ed.htm

Radiologist Michael Tobin website
Case study of patient with Achalasia and recurrent pneumonias - X-ray analysis
http://www.octet.com/~mikety/Answers/achalasia.html

Radiology Museum
Article on achalasia of the cardiac (muscle) and x-rays.
http://www.sbu.ac.uk/~dirt/museum/p7-745.html

Reuters Health Info - Irritable bowel symptoms may herald inflammatory enteric neuropathy
Doesn't mention achalasia specifically, but talks about pseudo-obstruction related to inflammatory neuropathies.

SNARED - Support Network for Achalasia and Related Esophageal Disorders
Interesting! Effort to organize local achalasia groups. Nice FAQ page on achalasia. Also has EZBoard support group for Achalasia (although it has not much traffic)
http://members.bellatlantic.net/~dicklahn/

STS Patient Information - Achalasia and Esophageal Motility Disorders
Society for Thoracic Surgeons on Achalasia - general information.
http://www.sts.org/doc/4120

Sagan's Disease (Carl Sagan)
Did you know Carl Sagan had achalasia? This page describes his experience with it.

Shiraz E-Medical Journal - Treatment Options in Achalasia
Article on Achalasia treatment from Shiraz University of Medical Sciences

Sleepnet apnea forum thread on apnea and achalasia
This discussion is about onset of achalasia for someone with apnea. Use of CPAP machine difficult with achalasia. Also questions if connection between the two problems.
Society for American Gastroenterological Endoscopy Surgeons (SAGES) Achalasia Quiz
This quiz is geared toward the medical community, but there is some interesting photos and information on achalasia.
http://www.sages.org/quiz/dec99quiz.html

Surgical Tutor - Dysphagia and Achalasia - From UK
Achalasia info - directed toward medical audience.
http://www.surgical-tutor.org.uk/default-home.htm?system/abdomen/achalasia.htm~right

Treating Achalasia - From Whalebone to Laparoscope
Article from JAMA, a review of the pathophysiology and management of achalasia. Includes summaries of controlled and uncontrolled studies on treatments. Also links to PDF of the article.
http://jama.ama-assn.org/issues/v280n7/rfull/jrv80010.html

Triple A Syndrome in a Saudi Family
Case study of patients with Triple A syndrome - rare condition consisting of Achalasia, Alacrima, and ACTH Insensitivity Syndrome (Allgrove Syndrome)

UpToDate - Achalasia
General Achalasia information - diagnosis, treatment, cancer risks, links
http://www.uptodate.com/patient_info/topicpages/topics/14564K8.asp

Vanderbilt Medical Center
General information on the incidence and treatment of Achalasia
http://www.mc.vanderbilt.edu/peds/pidl/gi/achala.htm

Versatile Viagra
Short article from Discover magazine stating use of Viagra is a 'cure' for Achalasia.
http://www.discover.com/jun_00/breakversatile.html

Viagra use in Achalasia Treatment
Brief info on use of Viagra in achalasia and testing by Dr Bortolotti in Bologna, Italy.

Virtual Hospital - Heartburn and Achalasia article
Interesting case study on achalasia and causation of heartburn both before and after treatment for achalasia.
http://www.vh.org/Providers/TeachingFiles/GICases/Esophageal/Heartburn/Heartburn.html

Virtual Hospital: Case of Achalasia
Teaching case of young woman with achalasia. Several photos. Interesting.
http://www.vh.org/Providers/TeachingFiles/GICases/Esophageal/Achalasia/Achalasia.html

Virtual Hospital: University of Iowa Family Practice Handbook. - Esophageal Diseases
General information on Achalasia.
http://www.vh.org/Providers/ClinRef/FPHandbook/Chapter04/09-4.html

What is Achalasia? Achalasia Q&A from Lifespan.org
General achalasia information, well organized with some nice info on deciding on treatments.
http://www.lifespan.org/mininvasive/Revised/patient/achalasia/about.htm
World Organization for Digestive Endoscopy (OMED) Journal article May, 1997
This issue contains an article entitled "Focus on Achalasia" which is brief but interesting.
http://www.uni.net/omed/issue6.htm

iVillage - Question to Dr about Achalasia
General information on the disease and treatment in format of answering patient's question.
http://www.ivillagehealth.com/experts/digestive/qas/0,11816,412225_128827,00.html

uhrad - Case Western Reserve Dept of Radiology - Case Study
Case study of 65-year-old woman with achalasia and a mass within the vallecula. X-rays.
References used to prepare this e-book

Arnon Lambroza, MD, 950 Park Avenue, New York, NY 10028, 212-517-7570 (Tel), 212-517-7789 (Fax), www.lambroza.com.


Appendix A:

Results of my initial endoscopy. Based on this, I was initially diagnosed with GERD and my doctor prescribed anti-acid medication.
Appendix B:

Results from my second endoscopy practiced abroad. Based on this exam I was asked to complete a manometry and a second set of swallowing tests. Later that week the initial suspicion of Achalasia was confirmed.
Appendix C:

X-ray shows the connection of the LES and the stomach. It also denotes a bird beak shape.
Appendix D:

Last x-rays show how the white solution fills the esophagus and has difficulty getting to the stomach.
Appendix E:

This is an exact copy of the pre-operative exam results provided to the last GI doctor who examined me and reconfirmed the diagnosis of Achalasia as my home country doctor had indicated.

As you can see, there are no signs of GERD.

Dear Dr.

VIDEO FLUOROSCOPY OF ORAL AND PHARYNGEAL PHASES OF SWALLOWING showed no significant abnormality. No mass, stricture, web, diverticulum or significant cricopharyngeal in coordination was present. There was no laryngeal or aspiration of barium. Tongue motion was within normal limits.

IMPRESSION: No significant abnormality.

THE THORACIC ESOPHAGUS was examined with biphasic technique and video-fluoroscopy.

Findings consistent with vigorous Achalasia are present with loss of the normal stripping wave at the thoracic inlet, episodic high spatial amplitude non-peristaltic concentrations of the distal half of the esophagus, frequent lumen obliterating contractions of the distal 3-4 cm tapered segment and break-like narrowing of the distal end at the lower esophageal sphincter which shows very erratic, infrequent opening. The tertiary contractions result in retrograde motion of the barium to the upper esophagus distending the esophagus above the carinal level.

Maximal caliber of the narrowed segment of the distal end of the esophagus was 6mm when corrected for magnification. Transverse caliber is 3cm through most of the esophagus. Liquid barium secretions pooled in the esophagus in the erect position to level of thoracic inlet. 12.5 mm barium tablet holds up at the lower esophageal sphincter and does not pass through with additional swallows of waters, barium or bicarbonate water.

Prone views of the esophagus with abdominal compression demonstrate no hiatal hernia. No gastro esophageal reflux was observed during this study. No stricture, ulceration or mass lesion was seen in the esophagus.

IMPRESSION: vigorous Achalasia with poor drainage of barium from the esophagus.

Thank you for referring this patient to us.