ORIGINAL ARTICLE

Achalasia – Different Treatment Options, Baloon Dilaation Alone Versus Baloon Dilatation and Diltiazam

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ABSTRACT

Objective: To find out different treatment options of balloon dilaation alone versus balloon dilatation and diltiazam in Achlasia.

Material and methods: This was a prospective observational study. Total 17 patients were selected and diagnosis was established with the help Chest x-rays, Barium swallow test, Manometry and Endoscopy. Treatment options being used in my study were either medications alone (calcium channel blocker), medicines and balloon dilatation in combination and balloon dilatation alone.

Results: Total 17 patients were registered. 10 were male and 7 were female patients. Mean age of male patients was 39 years and 37 years in female patients. 4 patients were put on calcium channel blocker, 3 patients were treated only with balloon dilatation and 10 patients were treated with Balloon dilatation and calcium channel blocker. The patients in 1st group responded partially and ultimately needed balloon dilatation on an average after 2–3 months. In 2nd group the 3 patients treated with balloon dilatation only. Among these 03 patients two patients needed repeat balloon dilatation after 7–9 months. The 3rd group who were treated with balloon dilatation and subsequently was put on calcium channel blocker lifelong.

Conclusion: The patients who were treated with balloon dilatation along with subsequent use of calcium channel blocker remained symptoms free for a longer period of time.

Key words: Lower esophageal sphincter, baloon dilaation, diltizam

INTRODUCTION

Achalasia is a rare swallowing disorder that affects about 1 in every 100,000 people. The first symptom is usually increasing difficulty with swallowing. Most people are diagnosed between the ages of 25 and 60 years. Although the condition is life long and cannot be cured, it can usually be controlled with careful monitoring and treatment. The specific cause of achalasia is unknown. However, patients with achalasia have two problems in the esophagus (the tube that carries food from the mouth to the stomach). The lower two-thirds of the esophagus does not propel food toward the stomach properly. The lower esophageal sphincter (LES), a circular band of muscle that lies at the junction of the esophagus and the stomach, does not function correctly. Normally, the LES helps prevent food from flowing backwards, from the stomach into the esophagus. The LES should relax in response to swallowing to allow food to enter the stomach.

In people with achalasia, the LES fails to relax, creating a barrier that prevents food and liquids from passing into the stomach. One theory is that the nerve cells responsible for relaxation are destroyed by an unknown cause. Damage to the LES and esophagus causes large volumes of food and saliva to accumulate in the esophagus. Most people can initially compensate for this. Eventually, the barrier progresses to the point where food and saliva cannot reliably enter the stomach. As a result, food and saliva build up in the esophagus.

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MATERIAL AND METHOD

This Prospective Observational study was carried out at Gastroenterology Department of Nawaz Sharif Social Security Teaching Hospital Multan Road Lahore from January 2008 to August 2011. The patients were selected on the basis of specific history of dysphagia, which is difficulty in swallowing (liquids or solids). This problem begins slowly and progress gradually. Other symptoms can include chest pain, regurgitation of swallowed food and liquid, heartburn, difficulty burping, a sensation of fullness or a lump in the throat, hiccups, and weight loss. Total 17 patients were selected and diagnosis was established with the help of following tests.

Chest x-rays: A simple chest x-ray may reveal abnormal changes in the esophagus and absence of air in the stomach, two abnormalities that suggest achalasia.

Barium swallow test: The barium swallow test is the primary screening test for achalasia. Barium swallows are usually performed under fluoroscopy, a

continuous low-grade x-ray, which is helpful for studying the motion in the esophagus.

Manometry: Manometry refers to the measurement of pressure within the esophagus and the LES. Manometry is always used to confirm achalasia. The test typically reveals three abnormalities in people with achalasia: high pressure in the LES at rest, failure of the LES to relax after swallowing, and an absence of useful (peristaltic) contractions in the lower esophagus. The last two features are the most important and are required to make the diagnosis.

Endoscopy: Endoscopy allows the physician to see the inside of the esophagus, LES, and stomach using a thin, lighted, flexible tube. Endoscopy is done while you are sedated. This test is usually recommended for people with suspected achalasia and is especially useful for detecting other conditions that mimic achalasia.

Achalasia treatment: Following are the treatment options being practised in different centres depending upon the availability of the facilities and expertise. Drug therapy (nitrates or ccalcium channel blockers), Balloon dilatation (pneumatic dilatation), Botulinum toxin injection at LES and Surgery (Myotomy). Unfortunately, none can stop or reverse the underlying problem. However, all of the treatments are effective for improving symptoms.

Two of these treatments (drug therapy and botulinum toxin injection) work by reducing the LES pressure while two other treatments, balloon dilatation and surgery (myotomy), work by mechanically weakening the muscle fibers of the LES. In my study I used three options which are either medication alone, medicines and balloon dilatation in combination and balloon dilatation alone.

RESULTS

Total 17 patients were registered from January 2008 to August 2011. Among these 17 patients 10 were male and 7 were female patients. Mean age of male patients was 39 years and 37 years in female patients. Among the 17 patients 4 patients were put on calcium channel blocker, 03 patients were treated only with balloon dilatation and 10 patients were treated with Balloon dilatation and calcium channel blocker. It was noticed that the patients in 1st group (only on calcium channel blocker) responded partially and ultimately needed balloon dilatation on an average after 2–3 months. In 2nd group the 3 patients treated with balloon dilatation only. Among these 3 patients two patients needed repeat balloon dilatation after 7–9 months. One patient did not report back from last three years and we supposed him to be settled uptil now. The 3rd group who were treated with balloon dilatation and subsequently put on calcium channel blocker lifelong, on an average these patients needed repeat balloon dilatation after 13 months. In 3rd group (balloon dilatation along with lifelong calcium channel blocker) 7 out of 10 patients developed symptoms of regurgitation.

DISCUSSION

In our study we found that that the treatment with combination of balloon dilatation and calcium channel blocker is the best treatment option for long term symptoms relief. We made a comparison of our study with Boeckxstaens GE 2007 study and found that he made a comparison of different treatment options and found that pneumatic balloon dilatation and myotomy are the best treatment options. Vela MF in 2006 noticed that there is no treatment available which can cure the Achalasia. Vela MF mentioned in his study that repeated pneumatic balloon dilation is required for continuous symptoms relief. He further noticed that even after myotomy, around 15 years after the procedure, the patient may redevelop the symptoms of dysphagia. In West RL study 2002 the therapeutic success rate was around 50% after four dilatations. The results of this study is almost similar with the result of our study as shown in group II patients who were treated with Balloon dilatation only.

CONCLUSION

It is clear from our study that the patients who were treated with balloon dilatation along with subsequent use of calcium channel blocker remained symptoms free for a longer period of time than those who were either prescribed calcium channel blocker alone or under gone balloon dilatation only.

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