

## Anal Stenosis Following Sclerotherapy Managed by Anoplasty

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### Abstract

Anal stenosis is a rare but serious disabling condition following ano rectal surgery, anal trauma, carcinoma, post radiotherapy and Crohn's disease. 90% of the anal stenosis is caused by overzealous haemorrhoid surgery. Stricture following sclerotherapy is also mentioned in the literature. In our cases disabling anal stenosis was for last 1 year following sclerotherapy of haemorrhoids leading to severe anal stenosis with diaphragmatic ring like annular stenosis. A formal Y-V anoplasty was performed which relieved the patients of their symptoms leading to satisfactory bowel movements.

### Key Words

Severe Anal Stenosis, Sclerotherapy, Overzealous Haemorrhoidectomy, Anoplasty

### Introduction

It is known that severe anal stenosis can result from overzealous haemorrhoidectomy (1-6). It is a serious disabling disease. Patient presents with difficult and painful bowel movements. Anal stenosis is a rare but serious disabling condition following ano rectal surgery, anal trauma, carcinoma, post radiotherapy and Crohn's disease. 90% of the anal stenosis is caused by overzealous haemorrhoid surgery. Stricture following sclerotherapy is also mentioned in the literature (3). This narrowing may result from a true anatomical stricture or a muscular stricture. Which leads to a functional stenosis. Diagnosis is not difficult as the patients usually presents with difficult or painful bowel movements (6). On the basis of severity, strictures are divided into mild, moderate and severe anal stenosis. In our cases disabling anal stenosis was for last 1 year following sclerotherapy of haemorrhoids leading to severe anal stenosis with diaphragmatic ring like annular stenosis (*Fig 1*). A formal Y-V anoplasty was performed which relieved the patients of their symptoms leading to satisfactory bowel movements.

### Case Report

We hereby present 2 cases both middle aged females with no comorbid diseases. Both had severe anal stenosis

caused by sclerotherapy for the treatment of haemorrhoids, by an unqualified medical practitioner. These injections were given all around the anus. Patient revealed that 3-4 injections were given, which led to diaphragmatic annular type tight anal stricture (*Fig 1*) with functional disability. Patient had undergone injection therapy a year earlier and from last 8 months were suffering from difficult painful bowel movements. Patients passed thin ribbon like stool after lot of exertion. On examination the stenotic anus did not allow insertion of tip of little finger (*Fig 1*). Only a tip of artery forceps (3mm) could only be passed after the routine investigations patients were taken up for surgery and Y-V anoplasty 2,1,4,5 was performed at the right lateral position with lateral internal sphincterotomy. Flap was sutured using an absorbable vicryl suture taking special care of the tip of the flap as it is known to undergo necrosis. A good mobilisation of the flap reduces the risk of necrosis. A tube drain was kept with gauze packing which was removed after 36 hours. Recovery was uneventful, patients were discharged on stool softener with advice to follow up in OPD for periodical anal dilatations.

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**Fig.1 Showing Stenotic Anus not Allow Insertion of Tip of Little Finger**



**Fig. 2 Severe Stenosis Allowing only tip of the Artery Forcep (3mm) to be passed**

After 6 months patients are doing well on follow-up (Fig3) with relief of symptoms and complete bowel satisfaction

### Discussion

Anal stenosis, although rare, is one of the most feared and disabling complication of ano rectal surgery. It has been known that haemorrhoidectomy is the most frequent cause but stenosis, may be consequence of other causes. Several operative and non operative techniques to treat haemorrhoids have been described, Milligan Morgan open haemorrhoidectomy most commonly performed, SRM stapled rectal mucosectomy, Parks submucosal and injection therapy are operative and non operative techniques mentioned (4-6). Our patient had also undergone injection therapy. physical examination confirms the diagnosis. Visual examination of anal canal and peri anal skin along with digital rectal examination usually suffice to establish the presence of anal stenosis. On planning a treatment for anal stenosis it is very important to know the severity of the disease. Milson and Mazier (6) distinguished anal stenosis as mild, moderate and severe on the basis of examination of tight



**Fig. 3 Six Months follow up of the Patient**

anal canal by lubricated index finger or a Hill Ferguson's Retractor. Severe stenosis is labelled when little finger cannot be inserted as in our case only tip of the artery forcep (3mm) could be passed (Fig 2). Further more stenosis may be diaphragmatic, ring or annular type. In our case it was diaphragmatic type stricture. Best treatment is prevention at the time of surgery. Mild to moderate strictures are usually managed by non operative techniques but severe stenosis is managed by formal anoplasty to treat the loss of anal tissue. Various type of flaps have been described which are rotational or advancement flaps. We have done Y-V advancement flap using vicryl as suture material. A good mobilisation and suturing without tension of the flap prevents the flap tip necrosis. Both the cases recovered uneventfully and were discharged on stool softeners with advice for periodic dilatations during follow-up. Recover was good as described by Casadesus et al. Patients were relieved of the symptoms. At 6 months follow up the results were excellent (Fig 3).

### References

1. Angelchik PD, Harms BA, Starling JR. Repair of anal stricture and mucosal ectropion with Y-V or pedicle flap anoplasty. *Am J Surg* 1993; 166: 55-59
2. Brisinda G, Vanella S, Cadeddu F, Marniga G, Mazzeo P, Brandara F, Maria G. Surgical treatment of anal stenosis. *World J Gastroenterol* 2009; 15(16): 1921-1928
3. Casadesus D, Villasana LE, Diaz H, Chavez M, Sanchez IM, Martinez PP, Diaz A. Treatment of anal stenosis: a 5-year review. *ANZ J Surg* 2007; 77: 557-559
4. Filingeri V, Gravante G, Cassisa D. Radiofrequency Y-V anoplasty in the treatment of anal stenosis. *Eur Rev Med Pharmacol Sci* 2006; 10: 263-267
5. Gingold BS, Arvanitis M. Y-V anoplasty for treatment of anal stricture. *Surg Gynecol Obstet* 1986; 162: 241-242
6. Milson JW, Mazier WP. Classification and management of postsurgical anal stenosis. *Surg Gynecol Obstet* 1986; 163: 60-64