

琉球大学学術リポジトリ

[原著] Our experience in treating 35 proctalgia cases : To clarify the disease etiology and the optimal therapeutic approach

メタデータ	言語: 出版者: 琉球医学会 公開日: 2010-07-02 キーワード (Ja): キーワード (En): proctalgia, coccygodinia, chronic perianal pain, etiology, therapy 作成者: Tokumine, Fumio, Takano, Masahiro, Shimada, Akira, Tsuji, Yoriyuki, Kuromizu, Joji, Muto, Yoshihiro メールアドレス: 所属:
URL	http://hdl.handle.net/20.500.12000/0002016074

Our experience in treating 35 proctalgia cases - To clarify the disease etiology and the optimal therapeutic approach -

Fumio Tokumine¹⁾, Masahiro Takano¹⁾, Akira Shimada¹⁾
Yoriyuki Tsuji¹⁾, Joji Kuromizu¹⁾ and Yoshihiro Muto²⁾

¹⁾ Fukuoka Takano Hospital, Shimobaru 2-24-36, Higashi-ku, Fukuoka, Japan

²⁾ First Department of Surgery, Faculty of Medicine,
University of Ryukyus, Uebaru 207, Nishiharachyo, Okinawa, Japan

(Received on November 14, 1997, accepted on September 22, 1998)

ABSTRACT

Thirty-five patients with chronic anorectal pain of obscure origin were analyzed. This syndrome has yet to be elucidated and its cause is unclear. The above 35 cases were investigated in order to clarify this syndrome. We treated the patients with analgesics, sedatives, and nerve block to the trigger-point of anorectal pain among others. Twenty-eight of the cases had bowel movement disorders such as IBS, constipation, diarrhea and the medications for these disorders were administered simultaneously with good results. In 2 cases, antidepressants were also prescribed with good results. The follow-up questionnaires for 26 patients with follow-up terms ranging from 6-28 months (mean 17.8 months) revealed excellent results in 17 cases, fair results in 4 cases and poor results in 5 cases. In total, 77.7% of the patients showed an improvement in their symptoms. The remaining 6 patients could not be followed up and 3 patients had already died. After analyzing these data, we thus concluded that the etiology of this syndrome should be divided into 3 categories consisting of: a disorder of the central nervous system including psychological disorders, an injury or inflammation of the nervous tract, and a mechanical overload of the pelvic floor. *Ryukyu Med. J.*, 18(3) 69~72, 1998

Key words: proctalgia, coccygodinia, chronic perianal pain, etiology, therapy

INTRODUCTION

Chronic pain of the anorectal area is usually one of the symptoms of such anal diseases as hemorrhoids, anal fistula, anal fissure, cryptitis, perianal abscess and sometimes malignancy. We rarely encounter patients who present with pain of an obscure origin. Various authors have called this syndrome proctalgia¹⁾, coccygodinia²⁾, chronic perianal pain³⁾ and so on. However, it is not certain that these terms refer the same disease, which thus makes the most the suitable treatment difficult. From 1992 to 1995, we treated 35 such cases which thus allowed us to better analyze this disease and its etiology.

PATIENTS AND METHODS

From June 1992 to March 1995, 35 cases of proctalgia were admitted to our hospital. All of them had been suffering from anorectal pain. The pain symptoms tended to worsen in most cases when standing, sitting, walking or during evacuation and were relieved when lying

down. The types of pain included: burning, swelling and a tightening sensation which was so severe that some cases even committed suicide. No patient demonstrated proctalgia fugax. After taking their histories and physical examinations, laboratory, radiological and endoscopic examinations were done to rule out any possible organic causes. For the treatment of most cases either local or field nerve blocks were performed to relieve the trigger-point of the pain. In addition, analgesics and sedatives were also prescribed. If they had other symptoms such as of IBS, constipation or diarrhea, other medications were also administered simultaneously for the treatment of these complications. Constipation and diarrhea were diagnosed based on subjective symptoms in comparison to usual bowel movements and the diagnosis of IBS was made based on these guidelines. In some cases either biofeedback therapy or levator muscle massage were added for relaxation of pelvic muscles. After finishing such treatments, the patients were discharged for the follow-up at our clinic. In this study, the history, site and degree of tenderness, treatment and

Table 1 Patient profiles (35 cases)

Case No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
Age	27	32	40	43	43	59	59	62	65	67	67	67	73	74	75	76	77	83	39	56	57	62	64	64	66	67	68	70	70	70	72	75	76	78	80		
Sex	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
Age of onset	22	31	40	43	42	39	44	57	65	61	66	58	72	73	75	76	76	83	38	56	57	61	61	63	65	50	67	63	66	67	71	70	74	77	79		
Duration of symptom(mo.)	60	12	6	2	19	240	240	61	6	8	4	108	17	14	5	1	8	2	12	1	2	8	38	2	12	204	12	72	50	36	2	60	24	12	10		
Tenderness	anal canal																																				
	levator muscle	○	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
	sacrum or coccyx	○	○	○	○			○	○	○				○	○	○			○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Complications (Op.●)	anal disease	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	orthopedic disease			○	○			○			○		○	●		○													○	○		○	○	○	○	○	○
	gynecologic disease																				●	●						●									
	psychiatric disease									○																									○		
	urologic disease											●																									
	IBS			○	○	○	○		○		○	○	○		○	○	○	○		○		○	○	○		○		○		○	○		○	○		○	
Constipation/Diarrhea		○								○	○				○	○	○						○		○		○		○	○	○	○	○	○	○	○	○
Abnormality of defecography	(-)	(-)	(+)	(-)	(-)	(+)	(-)	(+)	(+)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(+)	(-)	(-)	(-)	(-)	(-)	(+)	(-)	(-)	(-)	(-)	(-)	(+)	(-)	(+)	(-)	(-)	(-)	(-)	(-)	
Prolongation of pudendal nerve latency	(+)					(+)	(+)	(+)	(+)					(+)	(-)	(+)		(+)					(+)													(+)	
Treatment	nerve block(times)	30	12	10		5	17	1	23		12	10	8	79	16		37	9	7	5	49	36	9	7	19	10	45	2	35	70	153	61	7	13	131		
	biofeed back		○			○					○				○	○					○				○	○	○	○	○	○	○	○	○	○	○	○	○
	levator massage										○																○	○									
	antidepressant										○																									○	
	medication for IBS or IRS			○	○	○	○		○		○	○	○	○	○	○	○		○		○	○	○	○	○		○		○	○	○	○	○	○	○	○	○
	laxatives, anti-diarrheal drug	○									○	○				○	○	○									○	○	○	○	○	○	○	○	○	○	○
Follow up period(mo.)	13	31	15	18	17	20	36	20	24	39	18	14	19	11	6	17	19	17	8	7	20	28	18	8	29	20	20	25	27	11	20	28	6	13	21		
Result(score)	exellent(0-3)	○				○	○			○	○	○								○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
	fair(4-6)				○						dead			○	○			dead							suicide		○										
	poor(7-10)																○	○									○		○	○							

complications were all determined based on the patient hospital records. Furthermore, the patients were also contacted by mail or telephone to complete numerical rating scale questionnaires in order to determine their subjective status. A total of 26 patients completed the questionnaires. Six of the patients were lost to the follow-up and three had already died by the time this study was written, 2 of them from other systemic diseases while the other had committed suicide because of the pain.

RESULTS

Age and sex: The patient data are summarized in Table 1. Of the 35 cases, 18 cases were male and 17 cases were female. Their ages ranged from 27 years to 83 years of age and the mean age was 63.5 years. The ages of onset ranged from 22 to 83 years of age. They had been suffering from pain from 1 to 240 months before admission (average: 39.1 months).

Physical findings: The sites of tenderness were divided into three areas. Thirty-two cases complained of tenderness in the levator muscle region. However, 24 cases also complained of tenderness in the sacrum or coccyx. It appeared that most patients tended to have tenderness of the anal canal, and also usually had orthopedic or gynecologic illness, possibly caused by radiation pain due to nerve injury (Nos. 7, 13, 14, 29, 32).

Concomitant diseases: There were 26 cases who had concomitant anal diseases and almost all of the cases had undergone anal operations. Thirteen cases (Nos. 1, 2, 5, 7, 10, 12, 17, 23, 24, 26, 28, 31, 35) had suffered from anal pain before operation and the pain did not improve after the operation. In another 13 cases (Nos. 3, 4, 6, 8, 9, 18, 21 (sclerotherapy), 22, 25, 27, 32, 33, 34) the pain appeared after operation. However, in almost all cases (Nos. 3, 4, 6, 8, 9, 18, 22, 25, 32) pain had started at least 2 years after the operation. We could not definitely say whether such anal diseases were merely concomitant diseases or whether the anorectal pain was caused by these operations but, in almost all cases, we considered it to be merely due to concomitant disease. There were also 12 cases who were complicated by orthopedic diseases and sometimes accompanied with sciatica (Nos. 3, 4, 13, 14, 17, 33). Seven cases had gynecologic diseases (Nos. 20, 21, 27, 31, 32, 33, 35), 2 cases had psychological problems (Nos. 9, 31) and one case had undergone a urologic operation (No. 11). Furthermore, many cases also suffered from bowel movement disorders of such as IBS, constipation or diarrhea.

Laboratory data: Manometric studies were done in 29 cases but no remarkable co-relationship was observed between proctalgia and the manometric study. In some cases defecography and the pudendal nerve latency time were examined. Abnormal defecography was indicated in 8 cases and a prolongation of the pudendal nerve latency time was seen in 13 cases. We speculated

Table 2 Effect of treatment (26 cases)

Effect	Case No.	neve block(times)	IBS Treatment	laxatives or antidiarrheal drug	antidepressant	biofeedback	levator massage	Complications			Follow-up (mo.)
								Ortho.	Gyne.	Uro.	
excellent	1	30									13
	5	5	○								17
	6	17	○								20
	9			○		○					24
	11	10	○								18
	12	8	○								14
	13	79							○		19
	19	7	○	○							8
	21	49	○							○	20
	22	36	○								28
	23	9		○							18
	24	7	○								8
	26	10		○							20
	29	35						○			27
	31	153	○	○		○				○	20
34	13	○	○							13	
35	131		○						○	○	21
fair	4		○						○		18
	14	16	○	○			○		○		11
	15	49	○								6
	28	2		○			○				25
poor	16		○	○			○				17
	17	37	○	○					○		19
	27	45	○				○		○		20
	30	70	○	○			○		○		11
	32	61		○					○	○	28

IBS=Irritable bowel syndrome

※Ortho:orthopedic complications
 Gyne:gynecologic complications
 Uro:urologic complications

that these abnormalities in defecography indicated the cause of mechanical overload and a prolongation of the pudendal nerve latency time thus seemed to indicate the presence of nerve injury.

Treatment: In 31 cases a local nerve block was applied to the trigger-point of the anorectal pain, in addition to the simultaneously administration of analgesics and sedatives. If they were complicated with abdominal symptoms caused by IBS, constipation or diarrhea, other medications were also administered. In 12 cases either biofeedback or levator muscle massage was performed. In two of them, psychological examination indicated the patients to have psychiatric diseases that required antidepressants.

Effect of the treatments; Excellent results were obtained in 17 cases, fair in 4 cases and poor in 5 cases. The symptoms improved in a total of 77.7% of the patients (Table 2).

DISCUSSION

Pain in the anorectal area is usually caused by such anal diseases as hemorrhoids, anal fistula, anal fissure,

cryptitis, perianal abscess and malignancy. However, on rare occasions, we also come across patients who have anal pain of obscure origin. Various authors have named this syndrome proctalgia¹⁾, coccygodynia²⁾ and chronic perianal pain³⁾, among others. However, it is not certain that these names indicate the same disease which makes the treatment of such patients difficult. There have been many reports concerning such treatments, as nerve block, biofeedback, levator massage, coccygectomy, electrogalvanic stimulation, psychotherapeutic drugs, epidural steroid block and so on. However, no sufficiently effective treatment has yet been found. From 1992 we treated 35 cases of proctalgia. We treated such patients with various methods because no standard therapeutic plan has yet been established. However, the follow-up questionnaires revealed unexpectedly good results. Analysis of their data gave us some knowledge and hints concerning the etiology and treatment. As Bleijenberg and Kuijpers⁴⁾ pointed out, many of the cases had underlying chronic motility disorders; 20 cases had IBS and 8 cases had either constipation or diarrhea. In these cases the use of nerve block and medication for motility disorders proved to be the most effective treatment modalities (Nos. 5, 6, 11, 12, 14, 15, 19, 21, 22, 23, 24, 26, 28, 34, 35,). Based on these facts we hypothesized that such pain might thus be caused by mechanical

overload against the muscles or tendons of the anorectal area and such mechanical overload might therefore be caused by motility disorders. Accordingly, we thus assumed mechanical overload to be the cause of the anorectal pain. In such cases we selected a local nerve block as the treatment of choice if they had a trigger-point of pain in addition to medication for motility disorders. However, in some cases the effect of these treatments were only temporary (Nos. 13, 17, 27, 30, 31, 32, 35). In addition, many of these case also had orthopedic, gynecologic or urologic complications. As described by Neill and Swash, due to such complications⁴⁾ the intractable pain was thus hypothesized to be caused by either injury or inflammation of the nervous tract especially S2, S3 and S4. Therefore, many of these cases were also treated by either steroids (Nos. 13, 35) or epidural steroid block⁵⁾ (No. 35) to improve their symptoms. On the other hand, two cases (Nos. 9, 31) also improved after being treated with antidepressants. Neill and Swash also pointed out these patients to be emotionally labile with features of depression, anxiety and neuroticism³⁾. According to the hypothesis that the IBS is one type of psychosomatic disease, a psychological examination is also considered to play a significant role. We strongly believe proctalgia to be due to various causes, i.e. 1) a disorder of central nervous system; this includes psychological disorder, 2) an injury or inflammation of the nervous tract, 3) a mechanical overload to the supporting tissue of the pelvic floor, especially the muscles, tendons or bones. Accordingly the treatments were divided into 3 procedures consisting of: psychotherapeutic drugs, epidural

nerve block, and a local or field nerve block added with medication for bowel movement disorders. To distinguish these 3 causes, a spinal block trial is one of the methods to rule out disorders of the central nervous system. Detailed history and physical examinations also provided information about an injury of the nervous tract or mechanical overload caused by bowel movement disorders. In conclusion, the treatment of this disease is thus considered to be more effective based on our classification system.

REFERENCES

- 1) Granet E.: Proctalgias and allied noninflammatory perianal dyscrasias: coccygodynia, proctalgia fugax, neurogenic pruritus ani. *Am. J. Digest. Dis.* 13 : 330-333, 1946.
- 2) Simpson J. Y. : Clinical lectures on the diseases of women. Lecture XVII. On coccygodynia and deformities of coccyx. *Med. Times Gaz.* 4 : 1-7, 1859.
- 3) Neill M.E. and Swash M. : Chronic perianal pain: an unsolved problem. *J.R.Soc.Med.* 75 : 96-101, 1982.
- 4) Bleijenberg G. and Kuijpers H.C.: Treatment of the spastic pelvic floor syndrome with biofeedback. *Dis. Colon Rectum* 30 : 108-111, 1987.
- 5) Yoon K.S. Choi S.K. Amaranath L.A. Teo T. A. Piccirillo M.F. and Wexner S.D. : Caudal epidural block with methylprednisolone acetate in the management of chronic ideopathic rectal pain. *Coloproctology* 16: 161-166, 1994