

Original Article

Phlebosclerotic Colitis: Clinical Experience from a Southern Taiwan Medical Center

Mao-Kui Chen¹
Li-Chin Jen¹
Yu-Feng Tian¹
Shih-Sung Chuang²
Chia-Lin Chou^{1,3}

¹Division of Colorectal Surgery, Department of Surgery;

²Department of Pathology, Chi-Mei Medical Center;

³Department of Medical Laboratory Science and Biotechnology, Chung Hwa University of Medical Technology, Tainan, Taiwan

Key Words

Idiopathic mesenteric phlebosclerosis;
Phlebosclerotic colitis;
Mesenteric vein calcification

Purpose. This study aimed to enhance physician awareness of phlebosclerotic colitis (PC) through sharing our clinical experience.

Methods. A retrospective review was conducted of 29 patients who were diagnosed as PC at Chi Mei Hospital, Taiwan, between 2017 and 2021. Patients' demographic characteristics, clinical data and treatment results were analyzed.

Results. The included patients had a median age of 61 years, range 42 to 77 years. The majority of patients were female (23 cases). Only 11 patients (37.9%, 11/29) had history of long-term use of Chinese herbs or medicinal liquor. The most common symptoms were abdominal pain (100%, 29/29) and nausea/vomiting (51.7%, 15/29), followed by abdominal distension (34.5%, 10/29), and intestinal obstruction (13.8%, 4/29). Varying degrees of calcifications were found along the colon and mesenteric veins in all computed tomography (CT) images. The lesions were all located in the ascending and transverse colon, involving the terminal ileum or whole colon (100%, 29/29). A total of 23 patients underwent colonoscopy with all presenting characteristic dark purple-colored endoscopic findings. Conservative treatment with close follow-up was preferred in our series. Finally, nine cases received colectomy surgery due to failure of conservative treatment, refractory symptoms or colon perforation.

Conclusion. PC is an exceptionally rare but characteristic entity with unclear etiopathogenesis. Clinicians should be familiar with the imaging and endoscopy features of PC and radiologists should pay attention to thickening of the colon wall along with the calcifications. Abdominal CT and colonoscopy examinations help to make a definitive clinical diagnosis of PC.

[J Soc Colon Rectal Surgeon (Taiwan) 2022;33:163-171]

Phlebosclerotic colitis (PC), also known as idiopathic mesenteric phlebosclerosis, is a unique form of ischemic colitis characterized by thread-like calcifications along the affected colonic wall and mesenteric vein, with dark-purple colored mucosa on colonoscopy, involving the right hemicolon preferentially. Ischemic colitis is the most prevalent ischemic injury of the gastrointestinal tract. Clinical features of

ischemic colitis, including acute abdominal pain, hematochezia and diarrhea, are similar to those of acute mesenteric ischemia, inflammatory bowel disease or infectious bowel disease. Ischemic colitis is the result of colonic hypoperfusion and it can be roughly classified as occlusive and non-occlusive. Pathogenesis usually includes a transient compromise in the colonic vasculature, with parallel activation of an inflamma-

Received: April 12, 2022.

Accepted: July 6, 2022.

Correspondence to: Dr. Chia-Lin Chou, Division of Colorectal Surgery, Department of Surgery, Chi-Mei Medical Center, No. 901, Zhonghua Road, Yongkang Dist., Tainan 710, Taiwan. Tel: 886-6-281-2811; Fax: 886-6-281-4813; E-mail: clchou3@gmail.com

tory cascade caused primarily by reperfusion. Differentiated from the traditional ischemic colitis, the clinical features of PC are usually gradual and chronic. The disease almost exclusively affects Asians and people of Asian descent. Thus, we retrospectively reviewed 29 cases of PC in our local hospital over the last 5 years from January 2017 to December 2021. The study purpose was to enhance the awareness of PC through sharing our clinical experience.

Materials and Methods

A total of 238,391 patients received abdominal computerized tomography (CT) scan in Chi-Mei Medical Center, Taiwan, between January 2017 and December 2021. Among these, 1497 patients with the key word “colitis” in the CT scan reports were identified in the computer database, including those with diverticulitis, ischemic colitis and PC (Fig. 1). Of these, 29 patients diagnosed as PC were enrolled in this study. All clinical and demographic data of PC patients were collected from the medical records. Variables included clinical symptoms, vital signs, laboratory data, imaging studies, clinical course, and treatment strategy. The reasons for admission, methods of treatment, days of hospitalization, and post-operative follow-up were then analyzed, focusing on CT images, clinical symptoms, endoscopic features and types of treatment, which were reported as numbers and percentages.

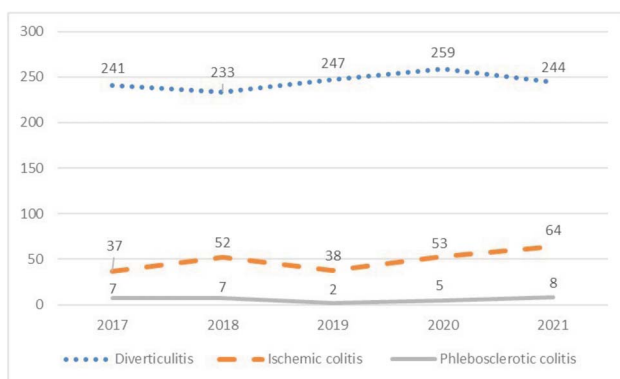


Fig. 1. Distribution of diverticulitis, ischemic colitis and phlebosclerotic colitis from 2017 to 2021 at Chi-Mei Hospital.

Results

Patients' demographic and clinical data

Among the included 29 patients, the 6 males and 23 females had a median age of 61 years, ranging from 42 to 77 years (Table 1). Of these, 8 patients had a history of hypertension, 6 patients had a history of coronary artery diseases, 4 patients had liver cirrhosis, 3 patients had diabetes mellitus, 3 patients had hepatitis and 5 patients had malignant tumors, including hepatocellular carcinoma (HCC) (3 cases), liver angiosarcoma (1 case) and ovarian cancer (1 case). No patients were found to have a definitive history of thrombosis. Calcifications along the marginal branches of the colonic and mesenteric veins were a common characteristic radiological finding. Most of the abdominal X-ray plain films showed multiple punctate or linear calcifications in the right hemicolon, which are easily missed in routine examinations. Fig. 2 shows the characteristic features of kidney, ureter, and bladder (KUB). Abdominal CT showed calcification of the mesenteric veins with thickening of the colonic

Table 1. Baseline demographic and clinical characteristics of 29 patients with phlebosclerotic colitis

Patient characteristics	
Characteristics	N = 29
Median age, year	61 (42-77)
Sex	
Male	6
Female	23
Symptoms	
Abdominal pain	29
Nausea/vomiting	15
Abdominal distension	10
Diarrhea	5
Hematochezia	4
Hematochezia	2
Clinical history	
Hypertension	8
Coronary artery disease	6
Cirrhosis	4
Diabetes mellitus	3
Hepatitis B/C	3
Malignant tumor	5
History of herbal medicines	11

wall (Figs. 3A, B). Increased density of surrounding mesenteric adipose tissue can also be observed. Calcification was more pronounced on the mesenteric side, mainly located perpendicular to the long axis of the colon. All 29 patients in this study underwent abdominal CT scans. Each of them encountered varying degrees of calcification in the mesenteric veins of the colon (Table 2). Diffuse wall thickening was seen in 18 patients. The rest only had calcification of the mesenteric vein, and no obvious thickening of the colon wall was found. All patients had varying degrees of abdominal pain, and 15 had symptoms such as nausea and vomiting. A total of 10 cases had abdominal distension. On CT images, all lesions were located in the transverse and ascending colons (100%, 29/29). Only 1 case had the lesion extended to the descending colon and 1 involved the entire colon. In total, 23 patients underwent colonoscopy. The most characteristic feature of colonoscopy is the multiple spots of dark purple color in the colorectal mucosa, which may be caused by chronic congestion with ischemia or invasion of the colonic mucosa by toxins (Fig. 4). This typical

finding was present in all of our colonoscopies (100%, 23/23). In addition, mucosal edema, erythema, ero-

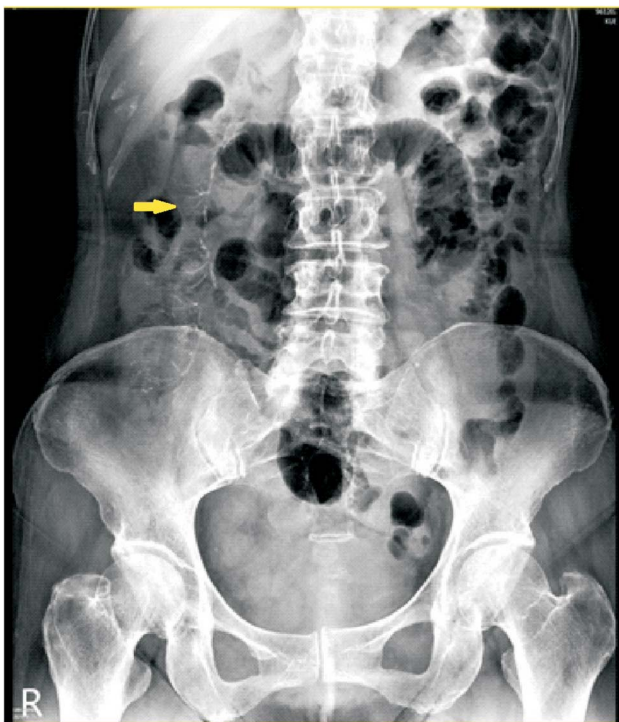


Fig. 2. Abdominal plain X-ray film. Linear calcification was identified in right side of the abdomen (arrowed area).

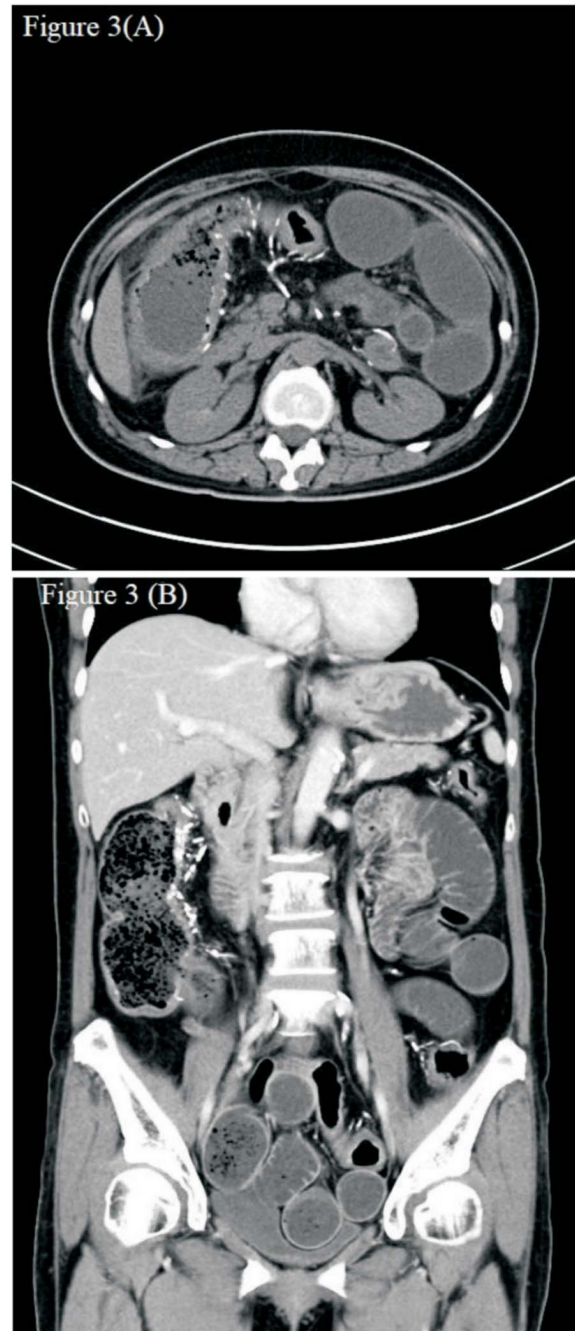


Fig. 3. Axial pre-contrast CT imaging shows wall-thickening and calcification within the bowel wall and adjacent mesentery (A). Coronal post-contrast CT imaging displays thread-like calcifications along the marginal branches of colonic and mesenteric veins with the thickened colon wall and adjacent vein from the ileocecal junction to the ascending colon (B).

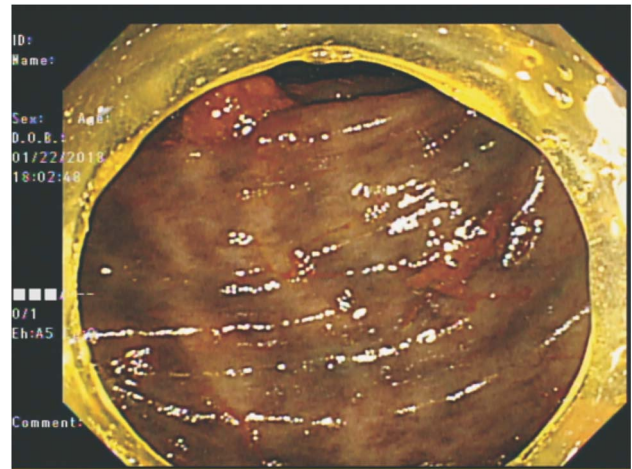
Table 2. Radiologic/endoscopic findings and treatment of 29 patients

Findings	
Abdominal CT scan (N = 29)	
Calcifications	29
Colonic wall thickenings	18
Colonoscopy examination (N = 23)	
Dark purple-colored colon	23
Erosions and ulcers	17
Luminal narrowing	9
Treatment	
Conservative treatment	20
Surgery	9

sions, ulcers, luminal strictures, focal nodular surfaces, stiffness along the bowel wall, and disappearing gastrointestinal tract were detected in the included patients. Colonoscopy revealed multiple erosions and ulcers in 17 patients (17/23, 73.9%). Nine patients (9/23, 39.1%) had luminal narrowing observed under endoscopy (Table 2). In our series, 11 patients (16%, 11/29) had a history of long-term use of traditional Chinese herbs or medical liquor and were asked to stop taking them. Conservative treatment and close observation are preferred in our group (Table 1). Conservative treatment mainly included bowel rest, hydration to improve microcirculation, preventive anti-infection, and supportive treatment. In addition, we also applied nutritional support therapy and probiotic supplements. One patient with abdominal pain initially presented to the emergency department with abdominal computed tomography that revealed a transverse colon perforation with severe peritonitis, which eventually led to surgery. Of the conservative treatment patients, 8 patients received surgical treatment due to treatment failure or recurrent, refractory symptoms. Histopathological findings were similar in these 9 surgical patients, all suggesting fibrosis of the colon wall with thickening and mesenteric veins calcification, colonic mucosal ulceration, all confirming the diagnosis of PC (Fig. 5).

Discussion

PC is an exceptionally rare but characteristic en-

**Fig. 4.** Colonoscopy showed dark-purple mucosal surface.

tity with unclear etiopathogenesis. The present study of 29 patients has shown that middle aged to older adults are most often affected by PC, and females more than males. Abdominal pain and were the most frequent presentations at onset, followed by abdominal distension and intestinal obstruction. CT images revealed varied degrees of calcifications along the colon and mesenteric, and all lesions were all located in the ascending and transverse colon, involving the terminal ileum or whole colon. Most patients underwent colonoscopy and all presented characteristic dark purple-colored endoscopic findings. All patients received conservative treatment with close follow-up, although nine cases received colectomy surgery due to failure of conservative treatment, refractory symptoms or colon perforation. We recommend that clinicians become familiar with the imaging and endoscopy features of PC and for radiologists to pay special attention to thickening of the colon wall along with the calcifications. Abdominal CT and colonoscopy examinations can help to ensure a definitive clinical diagnosis of PC.

In 1989, Iwashita reported the first mesenteric phleboscrosis as a new disease entity, describing it as an ischemic lesion resulting from phleboscrosis, and then followed by a series of articles from Japanese investigators.¹⁻⁵ In the year 2000, Yao et al.⁶ named these rare lesions “phleboscrotic colitis” to distinguish them from ordinary ischemic colitis caused by arterial diseases. Ischemic colitis is primarily caused

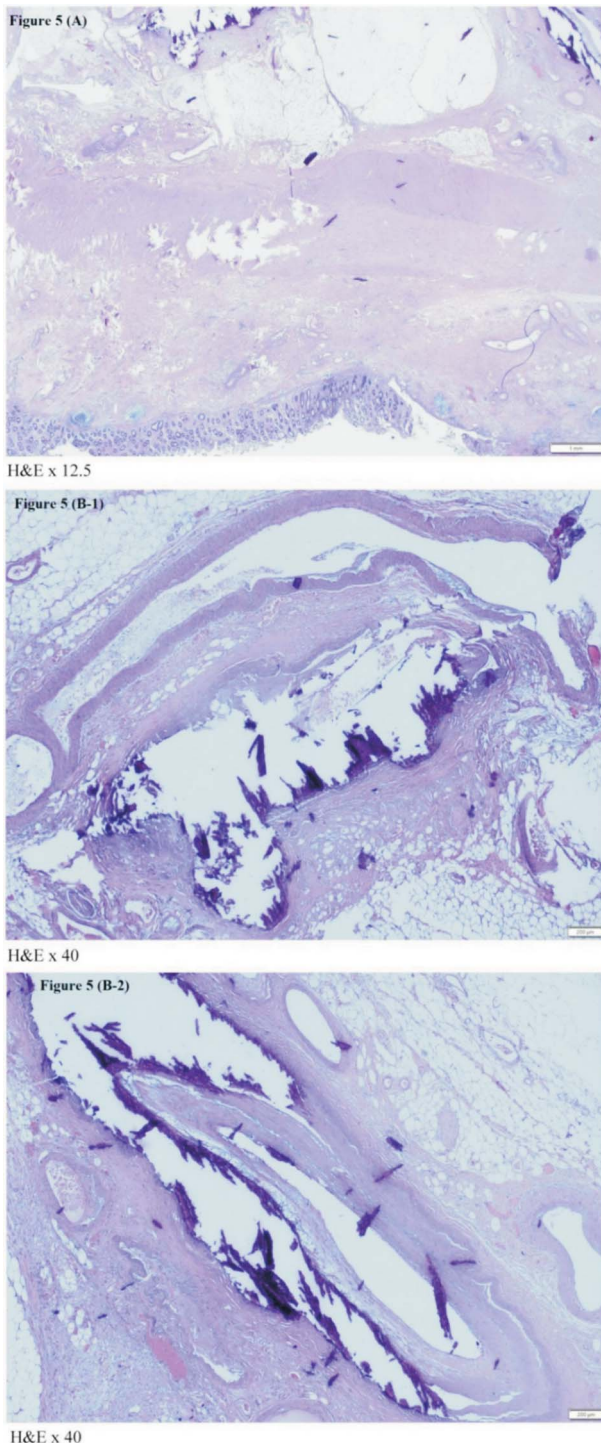


Fig. 5. The resected colon specimens show erosive/ulcerative mucosa. Collagen fiber deposition in edematous submucosa is noted. Both submucosa and mesenteric vessels reveal fibrous sclerosis, calcification and obliteration of lumen (A). Thickened subserosa layer with numerous inflammatory cells, fibrosis, and vascular congestion are also noted (B-1 & B-2).

by arterial obstruction secondary to arteriosclerosis, thrombosis or embolism in the left-sided colon. However, PC is affected by fibrosis and sclerosis of the mesenteric vein that cause colonic congestion.^{1,7} Due to the lack of pathological inflammation, Iwashita et al.¹ proposed the name “idiopathic mesenteric phleboscrosis” in 2003. Idiopathic mesenteric phleboscrosis is characterized by mesenteric vein calcification and venous congestion of the colon. In Taiwan, a few cases were presented for the first time at annual meeting of Society of Colon and rectal Surgeons, Taiwan in 2003 (but not published). The pathogenesis of PC remains undetermined currently. Most cases of this disease have been reported from East Asia, so an association with a region-specific lifestyle has been the focus of the etiology of this disease.^{7,8} A study published by Chen et al.,⁹ indicating the majority of patients were male, of which it was contrast with majority was female in this current study. The pathological changes of PC have also been reported in several articles, including atrophic mucosa with hemorrhage in some patients, obvious fibrotic submucosa, wall thickening, and luminal narrowing with focal calcifications in the veins of the colonic wall.^{6,10} Arterial intimal thickening and luminal narrowing may be also seen, but veins are more severely affected.¹¹ Chang⁷ analyzed histologic findings of PC, reporting a unique type of coagulative necrosis in the muscular coat of involved veins, and called it mummification. He suggested the disease might be initiated by a chronic hypoxic injury to the venous wall, which leads to gradual mummification and then sclerosis and calcification in this layer.⁷ As is well known, water absorption and some digestive activities, such as breakdown of carbohydrates known as fermentation, predominantly occur in the ascending colon and cecum. Certain toxic agents may also be absorbed by venous return from the proximal colon, which may reveal why PC usually involves the right-side colon.

In the present series, all PC was located in the ascending and transverse colon (100%, 29/29). Although only 11 patients (16%, 11/29) had a history of long-term use of traditional Chinese herbs or medicinal liquor, our imaging findings regarding distribution of venous calcifications progressing from mesenteric

veins to intramural veins and more proximal large veins may also support proposals that certain water-soluble toxins in herbal medicine or other toxic material could be absorbed into the mesenteric venous system, along with water, in the process of solidifying feces. Today, more and more studies reported that certain substances or toxins from ingested Chinese herbs may contribute to PC. More recently, it has been suggested that the use of herbal medicine may play a role in the pathogenesis, which focused attention on sanshishi.¹² Some studies have suggested that genipin, a metabolite of sanshishi, may be involved in the development of MP.¹² Indeed, it is known that genipin turns dark blue in color when it interacts with amino acids and/or proteins. In addition, geniposide, the main component of sanshishi, is metabolized by the beta-glucosidase produced from the gut microbiota in the lower gastrointestinal tract and then absorbed mainly in the proximal colon.

The diagnosis of PC depends on its distinct radiographic features, which are highly useful for a definitive diagnosis. They are as follows: (1) plain abdominal radiographs showing threadlike calcifications perpendicular to the long axis of the colonic walls in the right flank; (2) CT scans demonstrating a well-thickened colonic wall and venous calcification; (3) barium enema disclosing narrowing and thumbprints in the right hemicolon; (4) colonoscopic findings of dark purple-colored edematous mucosa indicating congestion, narrowing, and small erosions in the proximal colon; and (5) endoscopic ultrasound findings of well-thickened colonic wall and intramural calcifications in the right colon. In the comparisons between diagnostic modalities, plain abdominal films are commonly taken in patients presenting with various levels of abdominal discomfort. Awareness of the typical branching calcifications of the vasculature should prompt further investigations. CT scans are thought to be rather specific in diagnosing PC with findings that include calcification of the mesenteric veins and its tributaries. Abdominal CT should be the modality of choice. A semiquantitative scoring system of calcifications was described, relying on calcification distribution along straight, marginal and main branches of the mesenteric veins.¹³ While angiographic evaluation

primarily focuses on arterial blood flow, PC patients may present with a decreased venous phase perfusion that might be difficult to quantify. However, this leads to an obstructive blood flow and under-perfusion of the affected vascular region of the bowel. CT angiography is further able to demonstrate the precise location and extent of the calcifications, other concomitant abnormalities, and even extreme complications in the intra-abdominal vasculature and visceral organs in a noninvasive anatomic way, making it superior to invasive angiographic examinations. The symptoms of PC may be caused by chronic venous insufficiency and venous congestion, including chronic diarrhea, recurrent abdominal pain, nausea, vomiting, and tarry stool. Some patients in the early stage of the disease can even be asymptomatic, while those with advanced disease can present with intestinal obstruction and even perforation.⁵ Abdominal pain, nausea, vomiting and abdominal distension are the most common symptoms in our series. The treatment of PC still has no uniform standards. The symptoms often resolve with conservative treatment, including bowel rest and gastrointestinal prokinetic agents. However, if the symptoms continue to recur or if conservative treatment is not effective, surgical treatment is necessary. Some authors suggest that PC should be treated with non-surgical treatment until the disease is severe.^{14,15}

Most cases in the present report received non-surgical treatment initially. Only one patient received surgical intervention due to colon perforation at initial presentation in our emergency department. The other 28 patients received conservative treatment initially; 5 patients underwent surgical intervention at the same admission due to the failure of conservative treatment. Twenty-three patients were able to be discharged after conservative treatment and relief of symptoms. Three of 23 patients received surgical treatment due to recurrent and refractory symptoms. The majority of PC cases included in this analysis (20/29, 69.0%) were eventually resolved after receiving conservative treatment, leading us to suggest that conservative treatment is sufficient for most patients. At present, conservative treatment with close follow-up is preferred as one of the initial modalities for mild cases, and surgery (hemicolecotomy and subtotal or total colostomy)

is recommended for those patients with severe complications (e.g., intestinal obstruction, perforation, and hemorrhage) and for those with persistent symptoms after conservative management.¹⁴ Patients with long-term use of Chinese herbs and medicinal liquor were asked to discontinue these medications. Among conservative treatments for PC patients, bowel rest, improvement of microcirculation, prophylactic anti-infection, along with other symptomatic and supportive treatments were indicated. Hemicolectomy, subtotal colostomy, or total colectomy are considered curative treatments with relatively good prognosis. When deciding on surgery, the extent of resection of the diseased bowel is critical, and can be judged by the color of the serosa during the operation, thickening of the intestinal wall, extent of abdominal CT calcification and mucosal changes in the preoperative colonoscopy.¹⁶

The first case of mesenteric phlebosclerosis was brought to the attention of the medical community at a Japanese meeting in 1989 by Iwashita et al.¹ and the

term “PC” was first coined by Yao et al. in 2000.⁶ Since then, fewer than 80 cases have been documented in the English medical literature.¹⁷ We add the number of 29 cases in this article to organize a relevant table for easy reference by readers (Table 3).

This is a retrospective study and we search the key word “colitis” from CT scan reports in our computer database. Not every patient in our study has received colonoscopic examination, therefore, among these 1497 patients, the possibility of other forms of colitis or colorectal cancer cannot be completely excluded. This is the limitation of our study.

Conclusions

Analysis of the disease course, treatment and outcomes of 29 patients with PC have shown that distinct clinical, imaging, and histopathological features are necessary for the diagnosis of this rare entity to be

Table 3. Review of previously reported phlebosclerotic colitis cases and our cases

Author	Year	Patient numbers	Age, mean (range)	Gener	Surgical treatment	Chinese herb
Arimura Y ³	1998	2	-	1 male, 1 female	1	-
Yao T ⁶	2000	3	-	3 male	1	-
Yoshinaga S ⁴	2001	1	68	1 female	1	-
Oshitani N ⁵	2002	1	56	1 male	0	-
Iwashita A ¹	2003	7	-	-	-	-
Losanoff JE ²	2003	-	-	-	-	-
Hagiwara H ¹¹	2004	1	59	1 female	1	-
Markos V ¹⁰	2005	1	53	1 male	1	-
Chang KM ⁷	2007	5	(36-77)	3 male, 2 female	4	2
Hoshino Y ¹⁴	2008	1	68	1 male	0	-
Yoshinaga S ⁸	2009	-	-	-	-	-
Yu CJ ¹⁵	2009	1	56	1 male	0	-
Hiramatsu K ¹²	2012	25	61.8(30-86)	6 male, 19 female	6	25
Hu P ¹⁸	2013	3	(56-75)	3 male	0	0
Hozumi H ¹⁶	2014	1	73	1 male	0	1
Konishi HHM ¹⁹	2014	1	81	1 female	1	1
Lee SM ¹⁷	2015	1	57	1 male	0	1
Yen TS ¹³	2015	12	61.8 ± 11.5	6 male, 6 female	0	6
Lee SH ²⁰	2016	1	57	1 male	0	1
Shimizu S ²¹	2017	222	63.8 (26-89)	78 male, 144 female	36	222
Chen ⁹	2018	25	63.5 (47-87)	23 male, 2 female	3	4
Klein S ²²	2018	1	63	1 female	1	0
Mathew RP ²³	2019	1	60	1 female	0	1
Chen MK	2022	29	58 (42-77)	6 male, 23 female	9	11

made confidently. Treatment depends on the severity of the disease, ranging from conservative management to prompt surgical intervention. Awareness of this distinctive condition may be expected to allow more case reports and to inspire more explorations of the pathogenesis in the future.

References

- Iwashita A, Yao T, Schlemper RJ, et al. Mesenteric phlebosclerosis: a new disease entity causing ischemic colitis. *Dis Colon Rectum* 2003;46:209-20.
- Losanoff JE, Richmond BW, Jones JW, et al. Mesenteric phlebosclerosis. *Dis Colon Rectum* 2003;46:1573-4; author reply 1574-5.
- Arimura Y, Kondoh Y, Kurokawa S, et al. Chronic ischemic colonic lesion caused by phlebosclerosis with calcification. *Am J Gastroenterol* 1998;93:2290-2.
- Yoshinaga S, Harada N, Araki Y, et al. Chronic ischemic colonic lesion caused by phlebosclerosis: a case report. *Gastrointest Endosc* 2001;53:107-11.
- Oshitani N, Matsumura Y, Kono M, et al. Asymptomatic chronic intestinal ischemia caused by idiopathic phlebosclerosis of mesenteric vein. *Dig Dis Sci* 2002;47:2711-4.
- Yao T, Iwashita A, Hoashi T, et al. Phlebosclerotic colitis: value of radiography in diagnosis—report of three cases. *Radiology* 2000;214(1):188-92.
- Chang KM. New histologic findings in idiopathic mesenteric phlebosclerosis: clues to its pathogenesis and etiology—probably ingested toxic agent-related. *J Chin Med Assoc* 2007;70:227-35.
- Yoshinaga S, Nakamura K, Harada N, et al. Clinical features of idiopathic phlebosclerotic colitis. *Stomach Intestine* 2009;44:163-9. Japanese.
- Chen W, Zhu H, Chen H, et al. Phlebosclerotic colitis: our clinical experience of 25 patients in China. *Medicine (Baltimore)* 2018;97(43):e12824.
- Markos V, Kelly S, Yee WC, et al. Phlebosclerotic colitis: imaging findings of a rare entity. *AJR Am J Roentgenol* 2005;184(5):1584-6.
- Hagiwara H, Nagashimab T, Andoha K, et al. End-stage phlebosclerotic colitis: a rare cause of intramural calcification of the colon. *Eur J Radiol Extra* 2004;52(2):73-7.
- Hiramatsu K, Sakata H, Horita Y, et al. Mesenteric phlebosclerosis associated with long-term oral intake of geniposide, an ingredient of herbal medicine. *Aliment Pharmacol Ther* 2012;36:575-86.
- Yen TS, Liu CA, Chiu NC, et al. Relationship between severity of venous calcifications and symptoms of phlebosclerotic colitis. *World J Gastroenterol* 2015;21(26):8148-55.
- Hoshino Y, Matsumoto R, Takasaki T, et al. Gastrointestinal phlebosclerotic colitis. *J Gastroenterol Hepatol* 2008;23(4):670.
- Yu CJ, Wang HH, Chou JW, et al. Phlebosclerotic colitis with nonsurgical treatment. *Int J Colorectal Dis* 2009;24(10):1241-2.
- Hozumi H, Hokari R, Shimizu M, et al. Phlebosclerotic colitis that was difficult to distinguish from collagenous colitis. *Dig Endosc* 2014;26:594-8.
- Lee SM, Seo JW. Phlebosclerotic colitis: case report and literature review focused on the radiologic findings in relation to the intake period of toxic material. *Jpn J Radiol* 2015;33:663-7.
- Hu P, Deng L. Phlebosclerotic colitis: three cases and literature review. *Abdom Imaging* 2013;38(6):1220-4.
- Konishi HHM, Akimoto S, Suzuki H, et al. Surgical treatment of idiopathic mesenteric phlebosclerosis: a case report. *Jikeikai Med J* 2014;61:35-42.
- Lee SH, Kim JW, Park SJ, Heo JY, Paik WH, Bae WK, Kim NH, Kim KA, Lee JS. Obstructive ileus caused by phlebosclerotic colitis. *Intest Res* 2016;14(4):369-74.
- Shimizu S, Kobayashi T, Tomioka H, Ohtsu K, Matsui T, Hibi T. Involvement of herbal medicine as a cause of mesenteric phlebosclerosis: results from a large-scale nationwide survey. *J Gastroenterol* 2017;52(3):308-14.
- Klein S, Buchner D, Chang DH, Büttner R, Drebber U, Fries JWU. Exclusive phlebosclerosis of submucosal veins leading to ischemic necrosis and perforation of the large bowel: first European case. *Case Rep Gastroenterol* 2018;12(1):137-42.
- Hu P, Deng L. Phlebosclerotic colitis: three cases and literature review. *Abdom Imaging* 2013;38(6):1220-4.
- Mathew RP, Girgis S, Wells M, Low G. Phlebosclerotic colitis - an enigma among ischemic colitis. *J Clin Imaging Sci* 2019;9:18.

原 著

南部醫學中心靜脈硬化性結腸炎的臨床經驗

陳堯達¹ 鄭立勤¹ 田宇峯¹ 莊世松² 周家麟^{1,3}¹奇美醫療財團法人奇美醫院 外科部 大腸直腸外科²奇美醫療財團法人奇美醫院 病理部³中華醫事科技大學 醫事檢驗生物技術學系

目的 本研究目的是通過我們的臨床經驗提高對靜脈硬化性結腸炎的認識。

方法 對奇美醫院 2017-2021 年確診為 PC 的 29 例患者進行回顧性分析。分析患者的人口統計學、臨床數據和治療結果。

結果 患者的平均年齡為 58 歲，範圍為 42 至 77 歲。大多數患者為女性 (23 例)。僅有 11 例 (37.9%, 11/29) 有長期服用中藥和藥酒史。最常見的症狀是腹痛 (100%, 29/29) 和噁心/嘔吐 (51.7%, 15/29)，其次是腹脹 (34.5%, 10/29) 和腸阻塞 (13.7%, 4/29) 等。在他們所有的電腦斷層掃描 (CT) 圖像中都發現了沿結腸和腸系膜靜脈有不同程度的鈣化。病變主要位於升結腸和橫結腸 (79.3%, 23/29)。迴腸末端、全結腸受累也有被發現。23 名患者接受了大腸鏡檢查，均呈現特徵性的腸黏膜深紫色內視鏡檢查結果。在我們的系列中，首選是保守治療。最終，有 9 例因保守性治療失敗、反覆性症狀或結腸穿孔而接受手術治療。

結論 靜脈硬化性結腸炎是一種非常罕見但具有特徵性的疾病，發病機制尚不清楚。臨床醫師應熟悉靜脈硬化性結腸炎的影像學和內視鏡特徵，放射科醫師應注意鈣化旁結腸壁的增厚。腹部電腦斷層和大腸鏡檢查可以幫助做出臨床診斷。

關鍵詞 特發性腸系膜靜脈硬化症、靜脈硬化性結腸炎、腸系膜靜脈鈣化。