Yonsei Medical Journal
Vol. 43, No. 4, pp. 457 - 460, 2002

Original Article

Esophageal Involvement in Behçet's Disease

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Esophageal involvement in Behçet's disease is very rare, and normally is observed as aphtosis and esophagitis, but serious complications such as erosions, perforations, and stenosis may occur. We carried out this prospective study to evaluate the prevalence of esophageal involvement in Behçet's disease and to establish if routine endoscopy and/or manometry are necessary. Twenty-three patients who fulfilled the diagnostic criteria of the international study group for Behçet's disease were enrolled. None were taking drugs or had disease that might produce esophageal abnormalities or alter any existing changes due to the Behçet's disease itself. Twenty-three patients underwent esophagogastroduodenoscopy by a single observer. Esophageal biopsies were performed in thirteen patients and esophageal manometry in twenty. At the beginning of the study, the disease activity was defined by the presence of more than one symptom related to Behçet's disease, and upon the classification of Behçet's disease. Of the twenty three patients enrolled two were excluded from final analysis because of the presence of hiatus hernia. Thus, 13 men and 8 women, ranging in age from 20 to 63 years with a mean age of 36.2 years were included. Ten patients (47.6%) had active disease and four (19%) complained of upper gastrointestinal symptoms at the time of the study. Fourteen patients had endoscopic, manometric and/or microscopic abnormalities. Esophageal manometry was performed in twenty patients and was abnormal in 7 cases (35%). Esophageal biopsies were done in 13 patients and revealed histopathological abnormalities in 5 cases. Microscopic findings showed vasculities in one case, and non-specific inflammatory infiltration mainly consisting of neutrophils in 4 cases. Our results suggest that the prevalence of esophageal involvement in Behçet's disease is rather high and occur even in asymptomatic patients, but that this usually does not result in specific abnormalities.

Key Words: Behçet's disease, esophagus, endoscopy, manometry

Received February 24, 2001
Accepted March 30, 2002

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INTRODUCTION

Digestive manifestations in Behçet's Disease (BD) have been reported in 1 to 60% patients, the rate of which depends on the inclusion criteria used and geographical.[1] Such manifestations are related mainly to intestinal ulcers, especially in the distal ileum and the cecum.[2] Esophageal involvement in BD is very rare and to the best of our knowledge, only 45 cases of patients with marked uppergastrointestinal (UGI) symptoms have been reported to date, and these consisted primarily of isolated case reports.[3-29] Serious complications such as erosions, perforations, and stenosis may also occur. We carried out this prospective study to evaluate the prevalence of esophageal involvement in BD and to establish if routine endoscopy and/or manometry are necessary with a view to making an early diagnosis in order to prevent serious complications.

MATERIALS AND METHODS

Twenty-three patients who fulfilled the diagnostic criteria of the international study group for BD[30] were studied. None were taking drugs or had disease that might produce esophageal abnormalities or alter any existing changes dues to Behçet's disease itself. All patients were interviewed regarding their clinical features, the duration of the disease and any current or previous upper gastrointestinal symptoms (heartburn, chest pain, dysphagia, pyrosis). At the time of the study, disease activity was defined by the presence of more than one symptom related to BD, and was based on the international criteria for the

classification of BD. Twenty-three patients underwent esophagogastroduodenoscopy by a single observer. Esophageal biopsies were performed in thirteen patients and manometry upon twenty. The results were analysed using the student t test. p values of less than 0.05 were considered to be statistically significant.

RESULTS

Of the twenty three patients enrolled two were excluded from final analysis because of the presence of hiatus hernia, complicated by esophagitis in one case. Thus twenty-one patients were included, 13 men and 8 women, ranging in age from 20 to 63 years with a mean age of 36.2 years. The clinical manifestations of BD, endoscopic, manometric and microscopic findings in our cases are summarised in Table 1. In seven cases (33.3%) the disease duration was more than 5 years and ten patients (47.6%) had active disease. Four patients (19%) complained of upper gastrointestinal symptoms at the time of the study. Of the 21 patients included and that underwent fiberoptic endoscopy, three patients (14.2%) showed abnormalities, which consisted of esophagitis in one case (5%) (a 32 years old man with non active disease that lasts less than 5 years, who complained of chest pain and pyrosis, and showed no manometric abnormality, biopsy was not done), and 2 cases of duodenal ulcerations.

Table 1. Clinical and Paraclinical Features in Our Patients

N°	Age	Sex	BA	GA	PT	EN	PSF	Neur	Uvt	Ret Vas	Disease duration (years)	Disease activity	UGI	Endoscopy	Biopsy	Manometry
1	30	M	+	+	+	-	-	-	+	-	2	-	-	NL	NL	NL
2	37	F	+	+	-	-	-	-	+	+	4	-	-	NL	Esophagitis	NL
3	32	F	+	+	-	-	-	-	+	+	3	+	-	NL	ND	RP
4	37	F	+	-	+	+	-	-	-	-	10	-	-	NL	NL	NL
5	42	M	+	+	-	-	+	-	-	-	2	+	-	NL	NL	NL
6	43	M	+	+	+	-	-	-	-	-	2	+	-	NL	NL	D.LES.P
7	40	F	+	+	+	-	-	-	-	-	3	-	-	NL	NL	RP
8	31	M	+	+	-	-	+	-	+	+	7	+	-	NL	NL	NL
9	42	M	+	+	+	-	-	-	-	-	3	-	-	NL	ND	D.LES.P+CLA
10	35	F	+	+	-	-	+	-	-	-	3	-	P	NL	Esophagitis	NL
11	34	M	+	+	+	-	-	-	-	-	2	-	-	DU	Esophagitis Angeitis	NL
12	45	M	+	+	-	-	+	-	+	+	2	+	-	DU	ND	NL
13	32	M	+	+	-	-	-	-	+	-	20	-	P	NL	ND	CLA
14	32	M	+	+	-	-	+	-	-	-	2	-	P-D	Esophagitis	NL	NL
15	30	M	+	-	+	-	-	+	+	-	8	+	-	ND	ND	NL
16	63	F	+	+	+	-	-	-	-	-	2	-	-	NL	Esophagitis	NL
17	20	F	+	-	-	-	+	-	+	-	3	+	-	NL	Esophagitis	NL
18	20	M	+	-	-	-	+	-	+	+	8	-	-	NL	ND	NL
19	31	M	+	+	-	-	+	-	+	+	7	+	-	NL	ND	D.LES.P
20	37	F	+	+	+	-	-	-	+	-	10	+	-	NL	NL	ND
21	49	M	+	+	+	-	-	+	-	+	2	+	CP	NL	ND	D.LES.P

F, Female; M, Male; BA, Buccal Aphtous; GA, Genital Aphtous; PT, Pathergy Test; EN, Erythema Nodosum; PSF, Pseudofolliculitis; Neur, Neurological; Uvt, Uveitis; Ret Vas, Retinial Vasculitis; UGI, Upper Gastrointestinal; DU, Duodenal Ulceration; CP, Chest pain; D, Dysphagia; P, Pyrosis; D.LES.P, Decreased low esophageal pressure; RP, Repetitive contraction; CLA, Contraction of low amplitude; NL, Normal; ND, Not done.

Esophageal manometry was performed upon twenty patients, and found abnormal in 7 cases (35%), namely, repetitive contractions in 2 cases, contraction of low amplitude in one case, decreased low esophageal sphincter (LES) pressure in 3 cases and combination of the later two abnormalities in one case. Only 3 of these 7 patients suffered for UGI symptoms. Statistical analysis revealed no significant correlation of esophageal abnormalities with the following: - disease activity (p=0.43), disease duration of more than 5 years (p=0.92), ocular involvement (p=0.67) positive pathergy test (p=0.42) or any other clinical aspects of BD. Esophageal biopsies were done in 13 patients and these revealed histopathological abnormalities in 5 cases (38.4%). Microscopic findings showed vasculitis lesions in one case (Fig. 1), and non-specific inflammatory infiltration mainly consisting of neutrophils in 4 cases. Of these five patients, one suffered for heartburn and none had endoscopic or manometric abnormalities.

DISCUSSION

Gastrointestinal symptoms are commonly seen in patients with BD, which are often due to non-specific ulcers, especially in the distal ileum and cecum, but rarely in the stomach, duodenum, jejunum, rectum, and less frequently still in the esophagus.[2] However, this esophageal involvement might be underestimated because endoscopic examination is not performed in all cases. Since the first case reported by Brodie et al. in 1973,[3] only 45 retrospective case reports of esophageal involvement in BD have been published; 18 cases in Japan[4-11] and 27 cases in other countries.[2,12-29] In most of these cases, the patients were symptomatic enough to warrant upper gastrointestinal endoscopic examination. Esophageal lesions are mainly non-specific ulcers in the middle and/or the lower esophagus,[12,13,26] and serious complications such as erosions,[11] perforations,[22] esophagitis,[3,14] and stenosis[9] have been rarely described. Reported histological aspects have often been non-specific and consist of acute or chronic ulcers that variously penetrate the wall, with a high likelihood of perforation into muscle layers and with inflammatory cellular invasion by lymphocytes and/or neutrophils; angeits have been rarely seen.[6] Bottomley and el. reported the first prospective study of the esophagus in patients with BD.[28] This study concerned nine patients who underwent fiberoptic esophagogastroduodenoscopy; three patients were asymptomatic and six had UGI symptoms at the time of endoscopy. One patient had evidence of grade 1 reflux esophagitis, one patient had an incidental pyloric canal ulcer, and one patient who had severe dysphagia on presentation was found to have a high esophageal stricture with accompanying ulceration. Although the number of patients was small in Bottomley's study, the results obtained that the prevalence of oesophageal involvement in BD was low (11%) and non-specific. Our study involved more patients and revealed that endoscopic, manometric and/or microscopic abnormalities occurred in 66.6% (14/21) of cases and concerned symptomatic as well as asymptomatic patients. Esophageal involvement was not significantly correlated with disease duration, disease activity, or any other aspect of BD. Apart from microscopic findings in one case which showed vasculitis, all other endoscopic, manometric and histologic abnormalities were non specific. Our results suggest that the prevalence of esophageal involvement in BD is rather high and occur even in asymptomatic patients, but that generally such involvement is not associated with consisted mainly in no specific

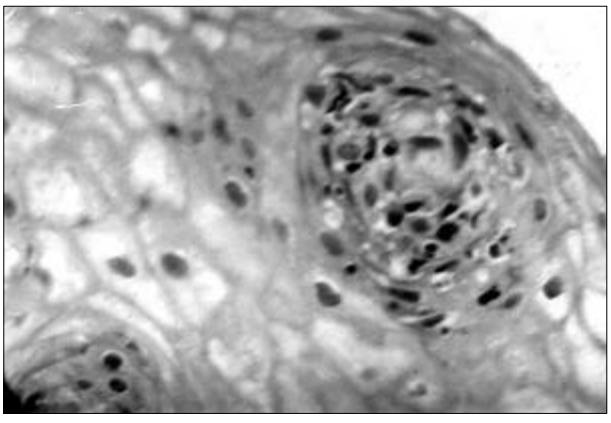

Fig. 1. Capillary endothelium proliferation and intense pleomorphic cellular infiltration with predominantly pleomorphonuclear leukocytes realising leukocytoclastic angiitis. Hematoxylin and eosin, × 200.

abnormalities. We conclude that unless a patient has marked esophageal symptoms there is no indication for routine endoscopy or manometry in patients with BD.

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