

Original Article

The prevalence of proctological symptoms amongst patients who see general practitioners in France

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KEY MESSAGE:

- There is a tendency for patients to conceal anal symptoms from their general practitioners due to social constraints.
- Patients cannot be treated properly for anal diseases without undergoing clinical examination.

ABSTRACT

Background: Patients do not often discuss anal symptoms, resulting in late diagnosis of proctological disorders and impacting health. Poor epidemiological knowledge is a contributing factor to this, which can be a significant problem in general medicine. Authors evaluated the role of family doctors in proctological disorders by assessing how many of these are spontaneously diagnosed and how many are diagnosed after questioning the patient.

Methods: Thirty-nine general practitioners completed a targeted questionnaire to assess all patients seen prospectively over 2.5 days of consultations.

Results: A total of 1079 questionnaires were completed, 621 (58%) for females and 458 (42%) for males with a median age of 54. Twenty-two patients (2%) were seen primarily for anal symptoms. Following questioning, an anal symptom was found in 153 patients (14%). Symptoms reported were: bleeding (32%), pain (31%), pruritus ani (22%), swelling (22%), oozing (14%), and anal discharge (14%). Physicians' diagnoses were: haemorrhoids, anal fissure, anal discharge, dermatology disease, and functional disorder. In 35% of patients, questioning alone was used to make these diagnoses. Anal incontinence was the only factor associated with referral to a specialist (OR = 5; 95% CI: 1.4–17.8).

Conclusion: The role of proctology in the general population appears to be significant. In five out of six cases, patients conceal anal symptoms. The high proportion of unexamined patients with anal symptoms is probably multifactorial. Further studies are needed to identify these and put in place the improvement of diagnosis and treatment of anal disorder.

Keywords: Proctology, anal, diagnosis, examination, general practitioners, epidemiology, haemorrhoids

INTRODUCTION

Anal disorders can significantly affect patients' quality of life. The discomfort caused by itching or 'poorly located' swelling, or from pain caused by abscess or haemorrhoid, can affect the patient's activities. Some functional disorders, such as anal incontinence, can result in patients changing or discontinuing normal activities, and can significantly affect quality of life (1). In extreme cases, the damaging nature of an anal disorder results in patients becoming socially withdrawn. The stigma surrounding anal disorders can result in a delayed diagnosis

with symptoms becoming chronic; for example, a fissure becoming infected; a simple fistula becoming complex with multiple ramifications; or cancer that metastasizes. While fissures diagnosed early can be treated medically without sequelae, fistulas require an anal sphincter section (fistulotomy) and may involve anal incontinence, which can be very difficult to treat.

Cultural and social constraints make it difficult for some patients to talk about problems in anal disorders, and doctors do not always ask patients about potential symptoms, which can delay diagnosis.

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Proctological teaching is generally very limited in France and varies largely between faculties, with an average of one hour of classroom-based study over the first six years of medicine. Doctors might be more aware of these disorders if they were familiar with anal disorder epidemiology.

In some patient groups, such as pregnant women or HIV-infected patients, anal disorders are well recognized (2,3). However, in general medicine, epidemiology data for proctology is very poor. One study assessed proctological reasons for consultations with general practitioners. Out of 18 000 practitioners, 161 were approached. A total of 885 patients were assessed, with pain and anal bleeding the two main reasons for consultation. Symptoms were long in duration, and patients considered them to be significant and worrying in 61% and 33% of cases, respectively (4). This study's design did not allow anal symptoms to be assessed by physicians in all patients. As far as we are aware, the prevalence of anal disorders in general medicine is not known. To enable patients to receive early treatment for anal symptoms, both patient and doctor must be aware of the prevalence of this problem. The objective of this study, therefore, was to assess, in general medicine, the percentage of patients seen spontaneously for an anal disorder, as well as the number diagnosed after targeted questioning by their doctor.

METHODS

Selection of family doctors

A total of 150 doctors (members of regional or national associations for family doctors involved in educational and coordination networks for treatment) were contacted in metropolitan France and French overseas territories. Thirty-nine agreed to participate. The only selection criterion was the agreement to complete a questionnaire for all patients seen during 2.5 days of consultation (Supplementary Figure 1, available online only at <http://informahealthcare.com/doi/abs/10.3109/13814788.2014.899578>).

Data collection

This descriptive study was conducted between 8 February and 24 September 2010. Doctors reported each patient's reason for consultation and, using targeted questioning, identified whether there were any anal symptoms. The proctological diagnosis was recorded, along with the diagnostic approach and treatment prescribed.

Statistics

Categorical variables were expressed as percentages and continuous variables as a median and range, or

mean \pm standard deviation (\pm SD). Univariate analysis was performed using non-parametric tests (Fisher's exact test) to compare the diagnostic approach between patients seen spontaneously for a proctological problem and patients for whom a proctological problem was shown after questioning. Variables associated with 'referral to a specialist' with $P < 0.20$ in univariate analysis were entered in a multivariate adjusted logistic regression model with a backward selection procedure and a $P = 0.05$ significance level to identify factors influencing 'referral to a specialist.' Odds ratios (OR) and 95% confidence intervals (CI) were also estimated. Two-way interactions were studied between significant variables in multivariate analysis, and there was no significant interaction at the $P = 0.01$ level in the final multivariate model. All tests were two-sided at the 0.05 significance level. Analyses were performed with SAS statistical software (SAS Institute, Cary, NC, USA, version 9.2).

RESULTS

Description of patients

Overall, 1079 questionnaires were completed, 621 for females (58%) and 458 for males (42%). The median age was 54 (range 34–68 years). The 39 doctors participating were distributed over 18 regions with a predominance in Ile de France ($n = 11$) and Provence-Alpes-Côte d'Azur (PACA) ($n = 4$), two of the most populous regions of France. Doctors were essentially working in metropolitan areas; three were in French overseas regions (two in Réunion and one in New Caledonia). Each doctor assessed on average 27.7 patients (± 4.3) over 2.5 days of consultation. Patients were mainly European (90.1%) with 4.0% North African, 2.8% West Indian, 1.1% Black African, 1.0% Asian, 0.8% Middle Eastern, and 0.2% Latin American.

Reasons for encounter

Out of 1079 patients evaluated, only 22 patients (2.0%) were seen spontaneously for a proctological problem (median age: 60.5; range: 49–76 years), whereas 347 (32.2%) were seen for a repeat prescription (median age: 66.0; range: 55–76 years) and 772 (71.6%) for medical reasons other than a proctological disorder (median age: 46.0; range: 29.5–62 years). Of the patients seen for other disorders, 15.3% were seen for an ear, nose or throat disorder (ENT), 13.7% for rheumatology, 8.8% for respiratory, 7.6% for gastroenterology, 6.6% for dermatology, 4.2% for psychiatry, 2.5% for endocrinology, 2.3% for urology, 1.4% for neurology, and 23.6% for other disorders, such as ophthalmology, stomatology, nephrology, and haematology. Patients may have had more than one reason for consultation.

Prevalence after questioning

Following targeted questioning to investigate possible anal disorders, problems were found in 153 patients (14.2%) (median age: 63.0; range 49–76 years), including 20 out of the 22 patients who had come spontaneously for an anal problem. An anal disorder was found after targeted questioning in 18.6% of patients seen for a gastroenterology disorder, 13.7% for a dermatology disorder, 12.1% for a cardiology disorder, 10.5% for an endocrinology disorder, 10.3% for a respiratory disorder, and 9.3% for ENT or other disorders. Notably, 69 of 153 patients with an anal disorder (45.1%) were initially seen simply for repeat prescriptions. No difference in distribution of anal disorders was found between different French regions, or between metropolitan and overseas territories (Réunion and New Caledonia).

Proctological symptoms and diagnoses

Following questioning, anal symptoms reported by patients were: bleeding (32.0%); pain (30.7%); pruritus ani (22.2%); swelling (21.6%); oozing (14.4%); and anal discharge (14.4%). None of the patients with anal discharge complained spontaneously about this during consultation. Based on these symptoms, diagnoses were:

haemorrhoids (48.4%); anal fissure (9.2%); anal discharge (1.3%); a dermatological disorder (7.2%); or a functional disorder (32.7%) of which 38% were diagnosed with constipation, 16% with diarrhoea, and 40% with anal incontinence or another disorder.

Diagnostic approaches

Questioning was the most frequent diagnostic tool (100% of patients with anal disorder cases). Questioning without a clinical examination was used in 54 of the 153 patients (35.3%). Examinations of the anal margin or rectal examination were not performed in 39.7% and 67.5% of cases, respectively, and 3 patients (2.0%) had an anoscopy.

Seven patients had anal symptoms without diagnosis identified by the doctor. Of these, only 1 had an anal margin inspection and an anal examination.

The 20 patients who spontaneously complained of anal symptoms were significantly better investigated clinically ($P = 0.01$) (by anal margin inspection and anal examination) than the 133 other patients with anal diseases who did not spontaneously complain of this during consultation (Table 1). No statistical difference was found for age between both groups.

Table 1. Description of diagnostic approach for 20 patients seen spontaneously for a proctological problem versus the 133 patients for whom it was shown that there was a proctological problem after questioning.

	Patients coming spontaneously for a proctological problem (<i>n</i> = 20) <i>n</i> (%)	Proctological problem after questioning (<i>n</i> = 133) <i>n</i> (%)	<i>P</i> -value ^a
Complaints			
Bleeding	8 (40.0)	41 (30.8)	0.4
Pain	12 (60.0)	35 (26.3)	0.004
Anal lump	2 (10.0)	31 (23.3)	0.2
Anal discharge	4 (20.0)	18 (13.5)	0.5
Uncontrolled anal leakage	0	22 (16.5)	0.08
Constipation	4 (20.0)	47 (35.3)	0.2
Diarrhoea	1 (5.0)	11 (8.3)	1.0
Pruritus ani	8 (40.0)	26 (19.6)	0.08
Examinations			
Examination of anal margin	16 (80.0)	75 (56.4)	0.05
Rectal examination	10 (50.0)	39 (29.3)	0.08
Anoscopy	2 (10.0)	1 (0.8)	0.045
Other clinical examination	4 (20.0)	2 (1.5)	0.003
At least one clinical examination in addition to questioning	18 (90.0)	79 (59.4)	0.01
Additional examinations	2 (10.0)	4 (3.0)	0.2
Diagnoses			
Haemorrhoids	11 (55.0)	63 (47.4)	0.6
Anal fissure	4 (20.0)	10 (7.5)	0.09
Abscess and/or anal fistula	1 (5.0)	1 (0.8)	0.2
Dermatology disorder	2 (10.0)	9 (6.8)	0.6
Functional disorder	2 (10.0)	48 (36.1)	0.02
Tumour	0	0	–
Anorectal STI	0	0	–
Treatment			
At least one treatment prescribed	19 (95.0)	97 (72.9)	0.046

^aFisher's Exact test.

Diagnoses made according to symptoms reported

Of 49 patients who reported anal bleeding, haemorrhoids were diagnosed in 37 cases (75.5%) and anal fissure in 10 (20.4%). Of the 33 patients who reported swelling, haemorrhoids were diagnosed in 31 (94%). Of the 47 patients who reported anal pain, 32 were diagnosed with haemorrhoids (68.1%) and 13 with anal fissure (27.7%). Surprisingly, none of the 14 patients with a combination of pain and anal swelling were diagnosed with anal fissure, despite having typical symptoms.

Treatments and therapies prescribed

For patients with haemorrhoids, topical agents were most frequently prescribed (66.2%), followed by venotonics (37.8%) and laxatives (20.3%) (Table 2). In patients with anal fissures, topical agents were prescribed in 11 of 14 cases (78.6%) and laxatives in 7 cases (50.0%).

After an anal disorder diagnosis by the general practitioner, 92 cases (60.1%) were referred to a specialist. These specialists were proctologists in 44 cases, gastroenterologists in 47, and a visceral surgeon in one case. Out of 49 patients with rectorrhagia, one was referred for lower endoscopy (32 of the 49 patients were at least 50 years old).

In a univariate analysis, factors significantly associated with referral to a specialist were: 'anal discharge' and 'uncontrolled anal leakage' symptoms ($P = 0.01$ and $P = 0.01$, respectively); and a rectal examination ($P = 0.05$) (Table 3). After multivariate analysis, only factors related to anal incontinence (anal discharge and uncontrolled anal leakage) were significantly and independently associated with referral to a specialist (OR = 4.8; 95% CI: 1.3–17.1 and OR = 4.8; 95% CI: 1.3–17.1, respectively). There was no significant interaction between these two variables.

DISCUSSION

Main findings

There was a high incidence of anal symptoms in patients who went to their family doctor for another reason

Table 2. Treatment of 74 patients diagnosed with haemorrhoids.

	n (%)
Topical	49 (66.2)
Venotonics	28 (37.8)
Laxatives	15 (20.3)
Anti-diarrhoeal	0 (0)
Suppository	2 (2.8)
Oral analgesic	4 (5.6)
Oral anti-inflammatory	3 (4.1)
Antibiotic	0 (0)
Local anaesthetic	1 (1.4)
Local antiseptic	0 (0)
Surgical procedure by the GP	2 (2.7)

Table 3. Factors influencing referral to a specialist among the 153 patients seen for a proctological problem.

	Univariate analysis Referral to a specialist n (%)		P-value ^a
	Yes (n = 92)	No (n = 61)	
Bleeding	32 (65.3)	17 (34.7)	0.4
Pain	29 (61.7)	18 (38.3)	0.9
Anal lump	17 (51.5)	1 (48.5)	0.3
Anal discharge	19 (86.4)	3 (13.6)	0.01
Uncontrolled anal leakage	19 (86.4)	3 (13.6)	0.01
Constipation	27 (52.9)	24 (47.1)	0.2
Diarrhoea	10 (83.3)	2 (1.7)	0.1
Pruritus ani	21 (61.8)	13 (38.2)	1.0
Haemorrhoids	43 (58.1)	31 (41.9)	0.7
Anal fissure	9 (64.3)	5 (35.7)	1.0
Abscess and/or anal fistula	2 (100.0)	0 (0)	0.5
Dermatology disorder	4 (36.4)	7 (63.6)	0.1
Functional disorder	32 (64.0)	18 (36.0)	0.6
Tumour	–	–	–
Anorectal STI	–	–	–
Questioning	85 (59.0)	59 (41.0)	0.3
Examination of anal margin	55 (60.4)	36 (39.6)	1.0
Rectal examination	35 (71.4)	14 (28.6)	0.05
Anoscopy	0 (0)	3 (100.0)	0.06
Other clinical examination	5 (83.3)	1 (16.7)	0.4

^aFisher's Exact test.

(14%), but this was only found after targeted questioning, suggesting that many patients are concealing their symptoms. However, even after patients reported anal symptoms after targeted questioning, doctors were cautious about their diagnoses, and in 35% of patients physicians made a proctological diagnosis without examination and by questioning alone. Anal incontinence was the only factor that was associated with referral to a specialist/proctologist.

Strengths and limitations

This study, as far as we are aware, is the first to assess prospectively and comprehensively the diagnosis of anal symptoms and disorders in general practice. All 1079 patients screened by 39 doctors, answered a simple and brief questionnaire, giving this assessment real epidemiological value. It is, however, possible that the doctors who agreed to participate were particularly aware of the issues involved, which may have biased the outcome. A proctologist did not confirm the diagnoses made by the family physicians; some diagnoses appear plausible given the symptoms, whereas others seem debatable.

Comparison with existing literature

The level of spontaneous consultation for anal symptoms (2%) identified in this study is significant. Following

targeted questioning, the real prevalence of anal symptoms was 14%.

Other studies have shown patients' reluctance to complain of anal symptoms, which may be possibly due to restrictive cultural or social practices. Other studies have demonstrated this. For example, anal urgency or/and incontinence after labour affecting 10% of women (5), is unreported in 90% of cases (2), despite its potential repercussions on quality of life (1). Patients' reluctance to discuss anal incontinence is reflected in results found in this study as none of the 22 patients suffering from anal incontinence spontaneously complained during their consultations. Finally, the percentage of patients suffering from anal incontinence in this study population (14%) is very similar to other studies conducted in the general population in various countries (1,6).

Further questioning of these 153 patients found the main symptoms reported were: bleeding (32%), pain (31%), pruritus ani (22%), swelling (22%), oozing (14%) and anal discharge (14%). In this study, there was no disparity in the distribution of anal symptoms compared with other studies. Our data was very similar to those of another French team who evaluated 831 patients seen by 161 general practitioners for a proctological problem: bleeding (37%); pain (48%); pruritus ani (24%); and anal swelling (26%) (4).

In addition, of 59 patients seen initially for gastroenterology disorders, the proportion of patients with anal disorders (18.6%) is consistent with data in the white book of the National French Gastroenterology Society (SNFGE), which reported the proctological role (20%) for gastroenterologists (7).

Doctors were often cautious in their diagnoses. For example, almost all anal swelling (94%; 31 out of 34 patients) in this study was attributed to haemorrhoids despite the high proportion of patients with anal fissures often reported in proctology literature. In this study, 28% of anal pain was attributed to an anal fissure. Although haemorrhoids are the most common benign anorectal disorder in the general population, studies have shown that anal pain is often secondary to an anal fissure rather than anal disease (8). Physicians should also be aware that patients with anal fissures typically also have symptoms of anal swelling, which are also responsible for a swelling called a sentinel skin tag, which could be discovered by anal examination (9).

Implications for practice and future research

Although this study focused on evaluating proctology's role in general medicine, it is notable that doctors who were aware of proctological issues only examined the anal margin in 60% of cases, and performed a rectal examination in 32% of patients with anal symptoms. It can be assumed that, outside this study, a simple clinical examination of the anus is done even less fre-

quently in general practice. Diagnosing an anal disorder without an anal examination must affect correct diagnosis, such as anal fissure with skin tag (pain and anal swelling with/without rectorrhagia), anal fistula (anal discharge with/without swelling), anal condyloma, and anal cancer. Studies have shown that anal condyloma and anal cancer have a particularly high prevalence in patients with HIV (10–13). This low rate of clinical examination is a reason why we should be cautious when interpreting our colleagues' diagnoses.

With respect to therapeutic care, there were inconsistencies. It is justifiable that most patients with haemorrhoid disorders and anal fissures would benefit from a topical treatment as first line therapy. However, it is concerning that only 19% of patients with haemorrhoids, and 1 of 2 patients with anal fissure were prescribed a laxative, despite regulation of bowel movements being the cornerstone of treatment for these disorders according to the guidelines (14–16).

Screening for potential underlying lesions in proctological disorders still seems to be a problem due to physicians not complying with recommendations for referring patients for colonoscopy (17). Of 49 patients with rectorrhagia in the study, only 1 was referred for lower endoscopy, even though 32 of the 49 patients were at least 50 years old.

It is well known that the incidence of several proctological disorders is underreported and underestimated, and in particular, there is a lack of data on the prevalence of these disorders among patients attending the primary care setting (18,19). For example, only 20% of women (out of 1228 women) affected by anal incontinence reported their symptoms to a medical practitioner (19). It is important that not only should further studies be done to try to understand the true landscape of proctological disorders in the general population, but improving treatment of these disorders will only occur when medical training (qualitative as well as quantitative) is improved.

It is not clear why doctors do not systematically examine the anus when patients report anal symptoms and why patients do not always report their true symptoms, though possible reasons may include patient inhibition, limited time at the initial consultation to perform time-consuming examinations, lack of information or training for family doctors on anal disorders, and restrictive cultural or social practices. This study showed that the prevalence of proctological disorders in general practice is much higher than anticipated and together with the physicians' lack of physical examination may result in missing diagnoses or appropriate referral to a specialist or for further testing.

Our study design cannot determine the true reasons for underreporting of symptoms by patients and lack of examination by doctors but more studies are needed. A future qualitative study using interviews may provide further useful insights in this area and improve diagnosis and patient management.

Conclusion

This study reports a very high incidence of anal symptoms and disorders in general medicine (14%). It is noteworthy that 35% of patients with these symptoms did not undergo an anal examination within our doctor's cohort. Reasons are probably multiple and need further study to improve the quality in the treatment of anal disorders within the general population. This study shows that doctors need to be aware that many of their patients may be concealing anal symptoms and an improvement in the diagnosis and treatment of proctological disorders is necessary.

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SUPPLEMENTARY MATERIAL AVAILABLE ONLINE

Supplementary Figure 1.