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ORIGINAL ARTICLE

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Sources of clinical referrals to an urban coloproctology unit in Italy

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Abstract Prompt and appropriate referrals to colorectal surgeons result in better clinical and more cost-effective outcome: the question that then arises is how patients with large bowel diseases get in contact with the specialist. The aim of the present research was to investigate the sources of clinical referrals of 1000 patients attending a dedicated coloproctology unit. One thousand consecutive new patients attending the private Coloproctology Unit of Rome were prospectively evaluated from May 1995 through December 1999. For each patient, the following data were collected: age, gender, source of referral, and disease classified as benign anal diseases, neoplasms, functional disorders or inflammatory bowel disease (IBD). There were 569 patients with benign anal disease, 334 with functional disorders, 57 with neoplasms, and 40 with IBD. Sources of referrals were: surgeons (32.6%), previous patients (23.6%), other specialists (22.8%), general practitioners (11.8) and others (9.2%). Overall, referrals from non-medical sources were 32.8%, whereas 67.2% of the cases were referred by other colleagues. Most of the referring specialists were surgeons or gastroenterologists, who sent 304 patients, whereas 9.4% of the cases were referred by other colorectal surgeons. Previous patients who were satisfactorily cured sent 23.6% of the cases. Only 1.1% of patients were referred by health insurance companies and 0.2% found the Unit through Internet. Colleagues who referred patients to the coloproctologist sent mainly cases with benign anal diseases and functional disorders. Few patients were referred for colorectal cancer and IBD as these diseases are routinely treated by general surgeons and their management is expensive in a private hospital for patients without insurance coverage. In conclusion, GPs, media, health insurance and Internet may be the most valuable targets of an information campaign, as their role as sources of referral was lower than expected.

Key words Clinical referrals • Coloproctology Unit • Benign anal diseases • Colorectal cancer

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Introduction

Coloproctology is a surgical sub-specialty in its own right [1, 2]. The quality of colorectal practice offered by surgeons dedicated to coloproctology was higher than that of general surgeons in a prospective study [3]. Therefore, it is important to refer proctological patients to the right specialist in a timely manner. Prompt and appropriate referrals to specialists for more severe or complicated cases result in better clinical and more cost-effective outcomes [4]. Interestingly albeit disappointingly, a steady decrease in the total number of procedures for haemorrhoids during an 8-year period has been observed in the USA; it has been speculated that this may be due to referrals of patients to other specialists [5]. The aim of the present prospective study was to evaluate the sources of clinical referrals for 1000 patients attending a dedicated coloproctology unit.

Patients and methods

We prospectively evaluated 1000 consecutive new patients attending the Coloproctology Unit of Rome from May 1995 through December 1999. Mean age was 49 years, range 1–89; 487 patients were men. The unit, a private colorectal centre based at Villa Claudia Hospital, consists of two colorectal surgeons (part time), one endoscopist, one gastroenterologist, one anaesthetist, two neurologists, one plastic surgeon, two nurses, one psychologist, one dietician, and a secretary. The medical instruments present in the unit include a 360° ultrasound probe, biofeedback instrument, polygraphs for anorectal manometry and an electromyography device. The unit has had a WWW site since 1997.

Of all operations for benign anal diseases, 15% are carried out on an outpatient basis. Most of the inpatient cases require a 48-hour hospital stay. None of the patients who received major operations for large bowel cancer or inflammatory bowel disease (IBD) were admitted for less than one week.

The two coloproctologists are members of scientific societies, such as the American Society of Colorectal Surgeons (ASCRS), and the Italian Association of Coloproctology Units (UCP). During the last decade they have published a total of 117 articles, including 99 in journals devoted to surgery and 18 in journals of general medicine, gastroenterology, epidemiology, etc. They attended a total of 86 meetings, including 57 meetings with a surgical/colorectal floor, 24 meetings attended mainly by gastroenterologists, and 5 congresses with a combined urological-gynaecological audience.

At the Coloproctology Unit, monthly meetings are routinely organised for the staff and for colorectal and general surgeons from Rome; occasionally urologists and gynaecologists of the same hospital or general practitioners working in the hospital area are invited. Villa Claudia Hospital itself has three outpatient departments, three operating rooms, a radiology department, laboratories and a haemodialysis centre. There are 3 wards with a total of 45 beds.

For each patient attending the Unit, we recorded age, gender, source of referral, and colorectal condition: benign anal diseases (e.g. haemorrhoids, fissure, fistula-in-ano), neoplasms (e.g. polyp, cancer of colon, rectum, anus); functional disorders (e.g. chronic constipation, proctalgia, rectal prolapse, anal incontinence), and IBD (e.g. ulcerative colitis, Crohn's disease, indeterminate colitis). Twenty possible sources of referral were considered, of which 9 were medical (e.g. other surgeons) and 11 non-medical (e.g. previous patients).

Statistical analysis (chi-square test, Fisher's exact test) was performed within each colorectal condition to ascertain statistically significant differences in relation to sources of referrals (only five simplified categories). A value of 0.05 was considered to be statistically significant.

Results

Mean age was 49 years (range 1–89); 487 patients were males, 513 females. The primary reasons for which the 1000 patients were referred to the Unit were benign anal diseases (56.9% of cases), neoplasms (5.7%), functional disorders (33.4%) and IBD (4.0%).

Overall, surgeons were the largest source of referral, accounting for 326 patients, followed by previous patients (n=236), other specialists (n=228), general practitioners (n=118), and others (n=92) (Fig. 1, Table 1). Colorectal surgeons alone accounted for 94 (9.4%) of the cases. Another

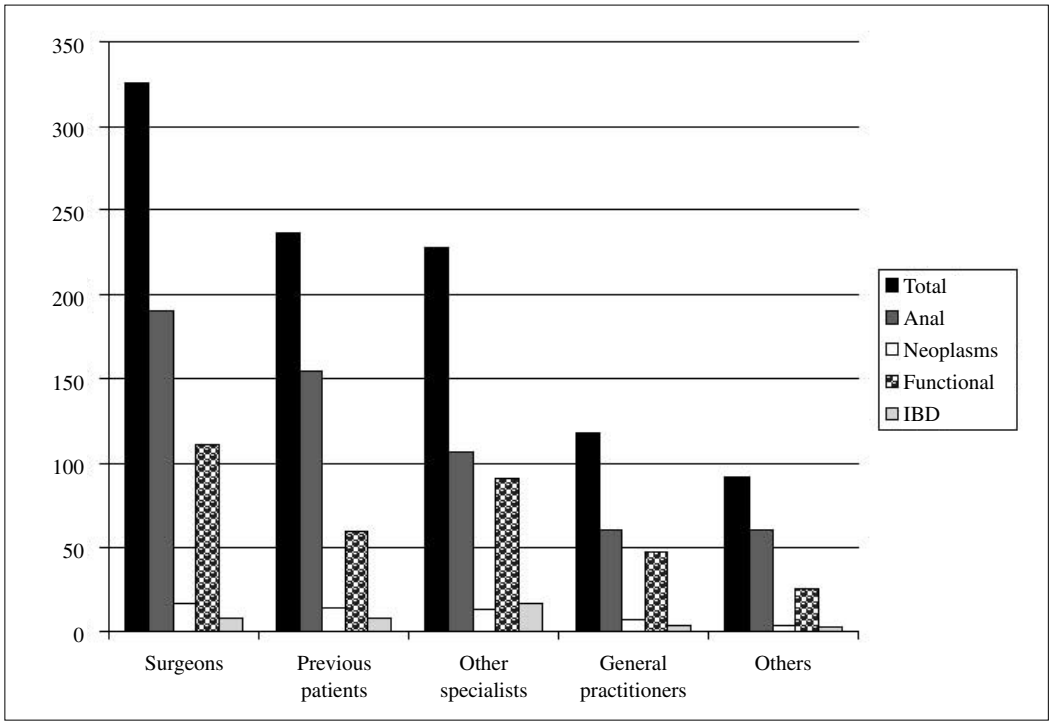

Fig. 1 Grouped sources of referrals of 1000 patients to the Coloproctology Unit of Rome. *IBD*, inflammatory bowel disease

Table 1 Sources of referral for 1000 patients attending the Coloproctology Unit of Rome, by disease category. Values are number (percent)

Benign	Anal diseases (n=569)	Neoplasms (n=57)	Functional disorders (n=334)	IBD (n=40)	Total (%)	
Previous patients	155	14	59	8	236	(23.6)
General practitioners	60	7	47	4	118	(11.8)
Surgeons						
General surgeons	120	15	73	2	210	(21)
Other surgeons	17	0	4	1	22	(2.2)
Junior colorectal surgeons	14	1	6	1	22	(2.2)
Senior colorectal surgeons	39	1	28	4	72	(7.2)
Other specialists						
Urologists	13	7	24	1	45	(4.5)
Gynaecologists	14	1	4	1	20	(2)
Gastroenterologists	41	3	36	14	94	(9.4)
Other physicians	39	2	27	1	69	(6.9)
Other sources						
Nurses	13	0	10	2	25	(2.5)
Medical representatives	1	0	3	0	4	(0.4)
Public hospital reception	2	0	1	0	3	(0.3)
Private hospital reception	12	0	3	1	16	(1.6)
Internet	2	0	0	0	2	(0.2)
Health insurance	10	0	1	0	11	(1.1)
Membership directories	3	4	3	0	10	(1)
Papers and TV	8	0	2	0	10	(1)
Brochures and medical companies	6	0	2	0	8	(0.8)
Conference and meetings	3	0	0	0	3	(0.3)

IBD, inflammatory bowel disease

large source of referral (23.6%) was represented by patients self-referring to our Unit after having gathered information and confidence from other patients, either relations, friends, or simple acquaintances who had already been treated at our centre. Patients were referred by doctors, nurses or clerical staff working at the Unit (86, 8.6%) or in the hospital (17, 1.7%). Non-medical sources, including other patients and other sources (e.g. media, Internet, insurance companies, nurses) represented 32.8% of all referrals.

Discussion

To the best of our knowledge, this is the first study to analyse sources of referrals to a coloproctology unit and, also, to a surgical centre in general. Overall, almost one-third of referrals (32.8%) was represented by non-medical sources, whereas more than two-thirds of patients were sent by colleagues. In 9.4% of the cases, the patients were sent by other colorectal surgeons.

Colorectal cancer and IBD patients represented a small minority of all referred patients, even though the Unit offers restorative proctocolectomy with ileoanal reservoir, low anterior resection with total mesorectal excision, and pouch coloanal anastomosis. The reason for this could be that general surgeons also treat large bowel cancer, Crohn's and ulcerative colitis in public hospitals where the patients' expenses are fully covered by the National Health Service. The surgical management of cancer and colitis is expensive in a private hospital without the support of health insurance, which is rather uncommon in Italy. Only a minority of the patients operated in our Unit were covered by a private insurance.

Benign anal diseases represented the majority of the referred cases. These are very common and diffuse conditions and that may be treated on a day-surgery basis in a private clinic more easily than in a public hospital in Italy due to administrative rules. Functional disorders represented one-third of the referrals due to the fact that conditions such as faecal incontinence, rectal prolapse and pain are not easily treated by non-specialists.

Among specialists, surgeons and gastroenterologists, made the most referrals. The largest source of referrals to our Unit was represented by surgeons, both with and without a special interest in coloproctology, either junior or senior. These surgeons may have chosen to refer patients to our Unit because of the convenient location of our Unit or the greater availability of diagnostic and therapeutic devices. The latter point raises the importance of acquiring state-of-the-art equipment to satisfy the expectations of both patients and

referring colleagues. Rosen et al. [3] have proven that there is a lower mortality rate associated with procedures performed by colorectal surgeons as compared to non-colorectal specialists (1.4% vs. 7.3%), parallel to severity of condition.

Only 11.8% of patients were directly referred by their own GP. This may be due to the fact that our Unit is a private centre and that in Italy people attending GPs are mainly public patients on a medical card. However, the low figure of GP referrals could also be due to disorientation or lack of information on the part of GPs, lack of confidence of patients towards their own GP, or reluctance of patients to discuss intimate conditions with their own GP. This raises the point of how to inform GPs about the services that a coloproctology unit can offer. Differently from North America, medical publicity in Europe is discouraged by local medical councils. Nevertheless, www pages are tolerated, but only three patients reached our Centre after having gathered information from Internet. This small number may be due to the limited diffusion of Internet in Italy up to the end of the 1990s, or to a poor visibility of the Unit's www site. Some sort of message should be provided to inform, alert, and update GPs and the public.

Listings in membership directories of foreign societies was a poor referral source, as only 10 patients (1%) were referred to our Unit after the name of one of the surgeons had been retrieved from the directory of ASCRS. On the contrary, 9.4% of the patients were referred by other colorectal surgeons, mostly UCP members, who may have used the UCP directory to identify our Unit.

An important number of referrals (159), not surprisingly, originated from related specialist, among them gastroenterologists (9.4%), who frequently share and, sometimes, compete with coloproctologists in dealing with conditions such as inflammatory bowel disease and chronic constipation. An inappropriate competition should clearly be discouraged, while precious help, assistance and referrals should be sought, shared, and mutually received. This is a long established practice in historical places such as St. Mark's Hospital in UK. Indeed, with regard to coloproctology and the relationship between surgeons and non-surgeons, differences do exist among North America, Japan, and Europe. ASCRS is the main coloproctological association in USA and Canada, and gastroenterologists are not admitted as active members. On the gastroenterology side, rigid sigmoidoscopies and anoscopies are not even listed in the Residency Review Committee in Gastroenterology [6]. In Japan, the Japan Society of Coloproctology is open to both surgeons and gastroenterologists with a special interest in coloproctology [7]. In Europe, in countries like France and Italy, gastroenterologists perform minor procedures such as rubber band ligation of haemorrhoids and limited haemorrhoidectomies. EACP and ECCP, the two major continental colorectal associations, are open to gastroenterologists, pathologists, etc. The Association of Coloproctology of Great Britain and Ireland is also open to gastroenterologists, while the British Society of Gastroenterology is open to surgeons. In Italy, around 10% of members of the Italian Federation of Coloproctology SICP-UCP are gastroenterologists.

However, when analysing the category "related specialists" more in detail, our research shows disappointingly low figures for urologists (4.5%) and gynaecologists (2.0%). Again, this could well be due to a lack of communication. Perineal anatomical structures include organs and functions of common interest to proctologists, urologists, and gynaecologists. During the last two decades the concepts of "pelvic floor" and of "perineology" have been developed and implemented, and societies, meetings, and papers devoted to the study of pelvic floor and treatment of its disorders conjointly by proctologists, neurologists, gynaecologists, and urologists have gained popularity [8, 9]. In any case, disappointingly but quite likely, many gynaecologists do not thoroughly investigate their own patients with regard to functional conditions such as anal continence (both clinical and sub-clinical), in spite of well ascertained anal sphincter damage found in up to 44% of cases after vaginal delivery [10]. Coloproctologists should perhaps search for cooperation with associations for patients' rights, which are now developing in Italy and in other countries, and give more papers and publish more articles in urogynecological meetings and journals.

Only 1.1% of patients were referred to us by private health insurance companies. This low figure may be due to lack of confidence of patients towards their own insurer, who could be seen as profit- rather than quality-motivated. Also, other reasons are represented by the statutory freedom for each individual to choose his own place of medical care, and by the fact that only a few insurance companies in Italy are organised with a central call centre to provide a service of orientation to their own patients.

In conclusion, the present study showed a major role of surgeons and previous patients in referring cases to a coloproctology unit. Few referrals came from GPs, urogynaecologists and private insurance companies. Finally, the study identified the need to increase the role of both the media and Internet as referral sources by demonstrating that "specialists do it better".

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References

1. Keighley MRB (2000) Colorectal surgery is a specialty in its own right. Tech Coloproctol 4:3–5
2. Goligher J (1997) Colorectal surgery as a specialty. Dis Colon Rectum 40:733–734
3. Rosen L, Stasik JJ Jr, Reed JF III, Olenwine JA, Aronoff JS, Sherman D (1996) Variations in colon and rectal surgical mortality: comparison of specialties with a state-legislated database. Dis Colon Rectum 39:129–135
4. Goldstein ET (1996) Outcomes of anorectal disease in a health maintenance organization setting. Dis Colon Rectum 39:1193–1198

5. Schoetz JD (1998) Colon and rectal surgery. A true subspecialty. Dis Colon Rectum 41:1–10
6. – (1996-1997) Graduate Medical Education Directory. Accreditation Council for Graduate Medical Association, Chicago, p 92
7. Tsuchiya S (1997) The Japan Society of Coloproctology: a brief history. Dis Colon Rectum 40[Suppl]:S64–S67
8. Henry MM, Swash M (eds) (1992) Coloproctology and the pelvic floor: pathophysiology and management. Butterworth-Heinemann, London
9. Brubaker LT, Saclarides TJ (eds) (1996) The female pelvic floor: disorders of function and support. Davis F.A., Philadelphia
10. Sultan AH, Kamm MA, Hudson CN, Thomas JM, Bartram CI (1993) Anal-sphincter disruption during vaginal delivery. N Engl J Med 329:1905–1911