Multispecialty surgical conditions in general practice

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ABSTRACT

Objectives: To report the incidence of multispecialty surgical conditions in patients presenting to a procedural general practice.

Design and setting: A more than 18-year survey (1 August 1983 – 31 January 2002) of the surgical records of a general practitioner–surgeon in an urban general practice.

Participants: 211 patients each with multiple, elective, surgical problems (mostly non-major) treated at one operation.

Results: The 211 patients represented 9.03% of the practitioner's elective, non-referred, general practice surgical workload. Two separate procedures were performed at one surgical episode for 155 patients (73.5%), three separate procedures for 53 patients (25.1%), and four separate procedures for three patients (1.4%). Having all surgical conditions treated in a single episode resulted in considerable savings in time, convenience and expense for both the patient and the health care system.

Conclusion: There appears to be a place, at least in our major cities, for an appropriately trained and recognised general surgeon, to service patients with more than one minor condition requiring surgery.

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Over the past 30 years, there have been significant changes in the role of the general practitioner relative to his specialist colleagues in general medicine or surgery. It has been observed that modern general practitioners, by virtue of improved training, and with ready access to evidence-based medicine and sophisticated investigations, have now acquired the skills and knowledge that were once the preserve of the general physician.[1] On the other hand, lack of postgraduate procedural training and experience, as well as soaring indemnity premiums, and hospital accreditation policies, has meant that general practitioners, especially in the major cities, have been forced to surrender all but the simplest of their surgical skills. Thirty years ago, it was commonplace for many general practitioners to perform a wide range of simple operations. Nowadays, patients are referred to surgical specialists. Coincident with this have been significant changes in the numbers and practice patterns of surgeons. For example, over the past 9 years, the number of general surgeons has decreased by nearly 20%, the general surgeon population ratio has decreased from 1:13 000 to 1:18 000,[2] and general surgeons are increasingly focused on special interests. In a recent Australia-wide survey of general surgeons and advanced trainees, only 18% described themselves as a "general surgical specialist", the remainder classifying themselves as a "general surgeon with special interests" (68%), or subspecialists (14%).[3]

The Royal Australasian College of Surgeons has confirmed this trend, describing "a diminution in the range of expertise held by surgeons", and continuing, "This more focused approach has tended to reduce the range of technical skills that are required for individual surgeons while increasing the demand for lesser procedures and consultations", and stating that, "The concept of general surgery has evolved away from being an amalgamation of all specialties towards being a mixture of specialties based primarily on abdominal surgery and trauma".[4]

This trend towards surgical specialisation is increasingly pervasive, encroaching on previously exempt areas such as emergency surgery.[5] This means that a surgeon, although capable of performing some types of surgery, typically refers these cases on to another surgeon because of his or her further subspecialisation.[6] In the metropolitan setting today, for example, general practitioners find that colorectal surgeons are loath to perform gastroscopies at the same time as colonoscopies, and the reverse is true for upper gastrointestinal surgeons. Ear, nose and throat surgeons would baulk if asked to remove some troublesome skin lesions while performing a tonsillectomy. This may be because they recognise the rights of their fellow specialists and are reluctant to intrude into their subspecialty, even though they are competent to do so. Alternatively, the present climate of litigation might be a contributing factor, and surgeons may feel safer if they confine their activity to a narrow procedural spectrum.

Some patients in general practice present with multiple conditions which might involve two or more surgical specialties; some also require regular endoscopic surveillance such as colonoscopy or cystoscopy. My study describes my practice as a general practitioner–surgeon working in a Sydney suburban group general practice for over 30 years. During half of this time I also held a public hospital surgical position. I present a series of patients presenting to general practice with multispecialty surgical disorders, who were treated under a general anaesthetic. The purpose of my article is not to promote "GP surgery", but to offer my perspective as a general practitioner with a special interest in surgery, who sees a role for a pan-specialty urban surgeon to whom primary care physicians could refer suitable patients. Such a practitioner would then merit the title "general surgeon" in its true historic sense, and would counterbalance the tendency to sub- and superspecialisation.

METHODS

My series consisted of 211 non-referred surgical patients presenting in general practice who underwent multiple procedures involving more than one area of specialty during a single operation. All patients presented for elective surgery between 1 August 1983 and 31 January 2002, and their operations were performed under a general anaesthetic in private hospitals. Patients having surgery under a local anaesthetic, emergency cases, and public hospital patients were not included.

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1 Types and numbers of operations (*n*=481)

Surgical specialty	Total no. (%)	Breakdown
Ear, nose and throat; Head and neck	29 (6.0%)	Tonsillectomy (16); Salivary calculus (1); Nasal cautery (4); Cervical glands or cyst removal (5); Thyroidectomy (3)
Gynaecological	19 (4.0%)	Dilatation and curettage, removal of polyps (11); Vulval cysts, warts (2); Hysterectomy, removal of ovarian cysts (6)
Breast	17 (3.5%)	Removal of benign breast lumps or cysts (16); Simple mastectomy (1)
Colorectal	101 (21.0%)	Sigmoidoscopy, colonoscopy (72); Haemorrhoidectomy (22); Fissure, simple fistula in ano (4); Pilonidal sinus (2); Colectomy (1)
Upper gastrointestinal	26 (5.4%)	Gastroscopy (19); Cholecystectomy (7)
Ophthalmology	8 (1.7%)	Eyelid cysts, chalazion (7); Eyelid reduction (1)
Orthopaedic	33 (6.9%)	Carpal tunnel release (7); Ganglion, synovial cyst (15); Ingrowing toenail (6); Stenosing tenosynovitis (3); Excision xiphoid, exostosis (2)
Vascular	18 (3.7%)	Removal of varicose veins
Skin and plastic	104 (21.6%)	Multiple moles, warts, superficial tumours (99); Skin flaps and grafts for skin cancer (3); Lipectomy (2)
Urology	30 (6.2%)	Vasectomy (10); Hydrocele, epididymal cyst (14); Circumcision (5); Orchiectomy (1)
General surgery	96 (20.0%)	Herniorrhaphy (53); Cysts, lipomata, etc (38); Appendicectomy (5)

2 Complications

Operation	Complication rate	Types of complications
Herniorrhaphy	8.7%	Recurrence in 7.5% (all before 1994, after which Maalex mesh repairs were used without further recurrence)
Colonoscopy	8.2%	Incomplete examination in 6.9%
Vasectomy	14.0%	Postoperative pain in 5.5%; infection in 5.5% (2 cases, one multisurgery [prostatitis]; one single-operation [epididymo-orchitis]); haematoma in 2.8%

Each patient had multiple disorders requiring operations in the areas of two or more separate specialties. Not, for example, cholecystectomy *and* removal of a large sebaceous cyst of the back (both in the domain of the general surgeon), or vasectomy *plus* removal of epididymal cyst (both classified as urological procedures). Neither were patients included who were undergoing gastroscopy *and* colonoscopy (both of which could be claimed as belonging to the territory of the gastroenterologist) or multiple intra-abdominal procedures (eg, appendicectomy *and* removal of Meckel's diverticulum, or removal of an ovarian cyst *and* tubal ligation).

RESULTS

The 211 patients requiring multispecialty surgery represented 9.03% of all my non-referred elective surgical patients. Of the 211 operations, 155 (73.5%) involved two separate specialty procedures, 53 (25.1%) involved three, and 3 (1.4%) involved four, a total of 481 procedures in all (Box 1).

Most procedures were relatively minor, but 15 patients (7%) had major primary operations (cholecystectomy, 7; hysterectomy, 4; partial thyroidectomy, 3; and left hemicolectomy, 1). Of these 15 patients, nine had their surgery within the first 6 years, before the advent of laparoscopic surgery. All were carefully selected, discussed in advance with the anaesthetist, and all proceeded without complication. There were no deaths in the series. Records of complications in earlier years are incomplete, but, during the period, I carried out four peer-reviewed surgical audits for hernia surgery, colonoscopies, and bilateral vasectomies that were performed in private hospitals.

These audits included 70 of the 211 multispecialty operations (33%), among which there was only one complication — a patient who had undergone vasectomy developed acute prostatitis after the surgery (circumcision and colonoscopy were the other operations carried out at the same time). This case of prostatitis settled promptly with antibiotics. Admittedly, the number of multispecialty cases audited was small, but these figures give a lower complication rate for individual multisurgery operations (1.4%) than single-operation surgical cases.

DISCUSSION

The issue in question is whether, in the present surgical environment, patients could be offered the convenience of a single operation and anaesthetic for multispecialty procedures such as in this series. In searching current literature, I have not found any similar series, although of course this does not mean that this type of practice is unknown. There is indeed ample documentation of the multispecialty workload of many surgeons working in rural or undeveloped areas.[7,8] Yet, the relatively high incidence (approaching 10%) of patients requiring multispecialty surgery (one patient per month presenting to a general practitioner) seems to indicate a need in our cities for the services of appropriately trained, accredited general surgeons who are recognised as being competent to perform a broad spectrum of operative procedures.

Arguments for

There are significant savings in money and time for patients, who are spared several anaesthetics and admissions to hospital. Furthermore, costs for multiple parties are minimised, pressure on hospital beds lessened, and, because of the rule of half and quarter fees applying to multiple surgery, insurance fund reserves are protected. Having two or more specialty surgeons cooperating at the one operation can be inconvenient to the surgeons concerned, may not be cost-effective, and may raise fee-splitting issues.

A surgeon prepared to treat all of the patient's current surgical problems is more likely than one who is focused on a subspecialty to consider the patient as a whole, and spend more time taking a history and doing a comprehensive physical examination. Such a general surgeon, provided he or she did not stray into major or complicated specialist surgery, would win the confidence of both GP and specialist colleagues, and generate a demand for this lower-level multispecialty service. The concept of a pan-specialty procedural "handyman" is easily grasped by patients, who appreciate the convenience of having all existing non-major surgical problems dealt with by one surgeon on one occasion. Just as a general practitioner completes a history by asking the question "Are there any other problems worrying you?", so the generalist surgeon would ask "Have you any other surgical problems we can fix up while you are asleep?" It is surprising how often a patient will only reveal the existence of a surgical problem they have been nursing for years (for instance a troublesome hernia) when an anaesthetic for another condition gives them an opportunity to have it also attended to. The savings are not only in money, time and convenience, but also in the perception, true or false, of less aggregate postoperative discomfort.

Finally, this type of practice also provides variety and interest for the surgeon.

Arguments against

There is the possibility of unnecessary surgery. The surgeon might ask, "While I'm at it, would you like me to take off these ugly tags and keratoses?", or the patient may say "While I'm asleep, could you do my moles and warts? And how about a colonoscopy too? Might as well get my money's worth!" The Medicare Benefits Schedule guards against this by stipulating that no fee is payable for removal of warts when other surgery is performed at the same operation, and benign lesions such as multiple seborrhoeic warts, if removed, have to be submitted for pathology tests and no fee for such common lesions is payable.[9] Patients who seek "add-on extras" for which there is no valid surgical indication should be counselled carefully as to the accepted indications and risks. Their request for what may seem unnecessary surgery should not be rejected out of hand. One of my patients, completely asymptomatic and without any predisposing factors for bowel cancer, insisted on having a colonoscopy and was found to have multiple polyps. In any case, unnecessary surgery is not confined to multispecialty surgery.

Another concern is the possibility of increased complication rates from multiple operations on one patient at the one time. My records in early years are incomplete, but audits of specific operations, which were performed in a third of the patients in this series, disclosed only one complication that could conceivably be attributed to multiple surgery (see results section). Naturally, if a surgical patient's medical condition is compromised, the shorter the time under the anaesthetic the better. Under such circumstances, it may be unjustified to perform additional elective procedures. Preoperative consultation between the general practitioner, surgeon, and anaesthetist is necessary to ensure a proper assessment of the cumulative impact of multiple procedures on an individual patient.

A third objection is the concern that a general surgeon would rob specialist surgeons of their "bread and butter". This is unlikely. Patients generally come well informed: they will choose a specialty surgeon for their primary condition and defer other lesser procedures if they prefer. Most patients referred to specialist surgeons for one condition are reluctant to mention other minor surgical problems they have. Patients are well aware these days that a surgeon to whom they have been referred for hernia repair may be unwilling or unable at the same operation to band their prolapsing haemorrhoids, or excise their Meibomian cysts or release their trigger finger. The lack of recognised generalist surgeons to treat such a plethora of conditions disadvantages some patients.

A further problem relates to the difficulty in the current surgical environment of providing appropriate training and continuing education for an aspiring pan-specialty surgeon. In a keynote address to the Royal Australasian College of Surgeons Scientific Congress in Canberra in 2001, it was stated that general surgeons who perform low volumes of particular procedures should continue to perform them if they have been "well-trained and continued to remain up to date with progress". A significant proportion of the practice of a multispecialty surgeon would fall into a low-volume procedural category. Perhaps the Rural Surgical Training Program, which permits a stream of trainees to rotate between various subspecialties to obtain the broad repertoire of surgical experience necessary for surgeons in rural or remote areas, could provide a precedent for meeting the professional standards necessary for multispecialty training and skills preservation. Such training would also help to dispel any perception that such surgeons are second rate.

CONCLUSION

There appears to be a place, especially in large metropolitan centres, for multispecialty surgeons, able to treat the relatively high proportion of patients with multiple, mainly minor, conditions spanning more than one surgical discipline. Such patients are currently not catered for in an increasingly inflexible system of surgical referrals. This type of surgical practice is safe and advantageous. Ideally, appropriate cases would be selected and carefully screened by their general practitioners and referred to such surgeons for "one-stop" treatment.

COMPETING INTERESTS

None identified.

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