

Minor operations performed under local anaesthetic in a day surgery unit

Stephen G.E. Barker^{1,*}, Nick Shaper, Sad Dzumhur², Paul A. Baskerville

The Day Surgery Unit, King's College Hospital, Bessemer Road, London, SE5 9RS, UK

Received 16 June 1997; accepted 6 July 1997

Abstract

Minor 'lumps and bumps' requiring operation under local anaesthetic constitute a significant number of referrals each month to general surgical clinics. These patients have often remained on hospital waiting lists for more than 1 year. A new system for managing these cases is presented whereby: (i) a large throughput of 'clinical material' is available for supervised teaching of both medical students and junior trainees; (ii) patients are operated upon safely and efficiently; (iii) the waiting list time can be significantly reduced; and (iv) the patient has an overall satisfactory hospital 'experience'. © 1997 Elsevier Science B.V.

Keywords: Minor surgery; Local anaesthetic; Day surgery; Ambulatory surgery

1. Introduction

Previously, in many general surgical 'out-patient' clinics, minor 'lumps and bumps' requiring operation under local anaesthetic would be assessed, taught upon and then have their surgery performed during the course of that same clinic. Today, there are two main reasons why this facility is often withdrawn: (i) a reduction in the number and availability of 'out-patient' nursing staff; and (ii) an increasing realisation that leaving the most inexperienced member of the surgical team to 'cut their teeth' on what can prove to be challenging procedures may not be ideal for the patient. Presently, patients requiring minor surgery could possibly be seen as a slightly awkward group to manage. They are still referred in significant numbers, cannot have their procedure the same day in the clinic and must be placed on a waiting list. Their teaching benefit

is reduced and they now take up the time of both a senior member and a junior trainee of the surgical team. It is possible to understand why patients awaiting minor surgery under local anaesthetic can gravitate and remain towards the bottom of surgical waiting lists.

This study details a new approach for undertaking minor surgical procedures (under local anaesthetic), allowing a prompt, safe throughput of patients, combined with an excellent opportunity for teaching at both medical student and junior surgeon levels.

2. Methods

Agreement was obtained that all letters addressed to any consultant surgeon from a general practitioner referring a patient for a minor operative procedure, would be re-directed to a file held within the Day Surgery Unit. At regular intervals a senior registrar would read each letter and construct proposed operating lists of up to 30 patients. Letters that did not seem straightforward were returned to the appropriate consultant's main surgical 'out-patients' clinic. Referrals that had already been seen in the main 'out-patients' department were added directly onto the operating lists.

* Corresponding author. Tel: +0044 171 346 3483; Fax: 0044 171 346 3484.

¹ Consultant Vascular Surgeon at University College London Hospitals.

² Consultant Surgeon at King George Hospital, Ilford, UK.

An administrative clerk in the Day Surgery Unit obtained any necessary medical records and informed the patients by letter of their surgery date. To minimise non-attendance, 2 weeks prior to their surgery date patients were given a confirmatory telephone call.

The surgical procedures were all performed by a senior registrar and registrar team, with house officers and medical students expected to attend and actively participate. One ten-bedded/chaired area of the Day Surgery Unit staffed by two nurses was set aside for each list. Up to 30 patients per list were treated. Groups of ten were given appointments to arrive (en bloc) every 60 min (for a planned operating session of approximately 4 h). On arrival, each patient had a name bracelet attached, was given their notes/referral letter to hold and was directed towards a bed or chair. The senior registrar, accompanied by a house officer and attendant medical students, reviewed each patient, taught, explained the procedure, marked the operative site, consented the patient and gave the local anaesthetic. Ten sets of local anaesthetic for each of the three, hourly groups had previously been drawn up, checked and placed onto cardboard trays together with sterile needles, cleaning swabs and gauze swabs.

In the Day Surgery Unit operating theatre, another two nursing staff had previously prepared ten minor operation sets, consisting of a scalpel, small dissecting scissors, toothed forceps, non-toothed forceps and stitch cutting scissors. Other potentially necessary equipment was available nearby, but kept wrapped until needed. Between cases, sets were re-sterilised using a 'Little Sister' automatic autoclave unit. In the adjacent anaesthetic room, a waiting area for the next patient to be operated upon was fashioned with an armchair, radio and magazines.

The registrar present undertook the first five or so operations whilst the senior registrar house officer and medical students continued to review patients on the ward. At the end of each procedure, the notes were written with a copy given to the patient to hand to his/her general practitioner, together with instructions for any sutures to be removed and whom to contact if any tissue sample had been sent for histology. Oral analgesics for 2 days were provided where necessary. The senior registrar, house officer and medical students, once the initial group of ten patients had been reviewed, changed places with the registrar in the operating theatre, who was then ready to review the second group of ten patients on the ward.

After the operation, each patient was given a hot drink and snack and checked to make sure that the wound site was satisfactory. They were given an information sheet detailing the persons to contact in the event of a complication including the mobile telephone number of a 24 h general advice service provided by one of the senior nursing sisters from the Day Surgery Unit. No follow-up appointments were made.

3. Results

Of the 215 referral letters read by the senior registrar in the Day Surgery Unit, only five were re-directed towards the main surgical 'outpatient' clinics.

With a catchment population of approximately 260 000, between 25 and 35 letters per month were sent for minor procedures to be performed under local anaesthetic block. Previously, such cases had been added to an individual consultant's Day Surgery Unit waiting list (which in 1994 averaged over 12 months). Following the introduction of the new system, the waiting list time for general surgery under local anaesthesia was reduced to a maximum of 2 months.

Of seven lists of 30 patients (total 210) who confirmed for attendance, 187 (89%) actually attended. Of the 23 (11%) who did not attend, only two (1%) responded to attend on another date and 21 (10%) were removed from the waiting list.

The average length of time taken per case was 8 min (range 3–27 min). Only one complication was recorded (0.5%) — persistent bleeding from a scalp wound following excision of a sebaceous cyst.

4. Discussion

Patients requiring surgery under local anaesthetic block constitute a significant number of referrals each month to general surgical out-patient clinics (for us 10–14 per 100 000 population). In the past, in many hospitals, these patients would have been reviewed, taught upon and subsequently operated upon in an area set aside in the out-patient clinic often during the same visit. Now, more usually, they are placed on a waiting list to have day surgery at some stage in the future (for us, frequently after a wait of a year or more). The percentage of day surgery is increasing with a level of 40%–60% of surgical throughput being achieved [1–3]. Thus there is often a second prioritisation step within day units, such that hernia repairs and varicose veins, for example, take precedence over more minor local anaesthetic procedures. Given the current referral rates experienced, it is not difficult to see why such patients may languish at the bottom of the surgical waiting list. When a patient is finally asked to attend for surgery it is no longer acceptable to have a very junior trainee operating alone and only calling for help when a supposedly easy procedure becomes unexpectedly awkward [3].

In this study, which describes a possible management plan for this type of surgery, we do appreciate that minor operations can form a 'nursery' for surgical training. We wanted to use the opportunity given by the Day Surgery Unit setting to improve the education of medical students and the training of house officers

(and senior house officers) in a more supervised atmosphere, where they could become increasingly familiar with common lesions and how to operate upon them, accompanied by more experienced registrars. The management plan also allows for a safe, efficient method of processing relatively large numbers of patients quickly, keeping waiting list times to a minimum. In our case, patients for minor surgery under local anaesthetic had to wait for 12 months or more, but now can be referred, seen and treated within a maximum of 2 months.

Increasingly, as the system became more streamlined, a significantly greater proportion of time became available for teaching both medical students and house officers. With fewer in-patients to teach upon regularly, the ability to instruct quickly and repetitively on 25–30 'lumps and bumps' at one sitting becomes invaluable.

Of all patients (210) who confirmed their attendance, 89% (187) actually had their operation. We consider the one in ten non-attendance rate acceptably low and ascribe this to the letter sent to the patient giving the date of operation backed by the telephone call from the administrative clerk 2 weeks prior to surgery. We felt it reasonable to remove a patient from the waiting list if they still did not attend after a second, mutually agreeable date had been arranged.

The senior registrar/registrar combination is an efficient one. Both are competent to assess each individual patient, explain the procedure, accurately mark the operative site, obtain consent and give the local anaesthetic block. Working in tandem as described, the average procedural time was only 8 min. The presence of two surgeons allowed one of them to teach medical students and house officers, take a coffee break, be called upon for occasional assistance, or to write up notes, take-away drugs and histology forms whilst the other surgeon completed any given operation. The complication rate (0.5%) was low [4–6].

From the patient's perspective, it could be envisaged that they were being treated on a conveyor belt. We tried to overcome this by breaking the group of 30 into smaller groups of ten, with three different admission

times. Each patient was welcomed by a nurse and promptly seen by one of the two surgeons. In the waiting area, a comfortable armchair, radio and magazines were provided. Post-operatively, all were given a hot drink and snack. These simple pleasantries seemed to do more to raise the patients sense of gratitude towards the NHS than the whole drive to keep them off a prolonged waiting list!

Prior to leaving, each patient was given information as to whom to contact in the event of a complication or concern about the surgery. In addition, our Day Surgery Unit gives each patient a 24 h mobile telephone number. The mobile phone is held by a senior nurse from the unit who can give advice directly or arrange further help for the patient if needed. We feel that this gives further reassurance to the patients and is better than giving a printed advice sheet alone.

In conclusion, with the current changes that seem to be affecting the way in which minor surgical procedures are being undertaken, we feel that there are many benefits to be gained from the system described. Minor operations performed under local anaesthetic can be safely and efficiently dealt with. The rapid throughput would appear to pay dividends both in the lowering of waiting list times and in the opportunities available for supervised teaching.

References

- [1] Ogg TW, Obey P. The workload of a purpose built day surgery unit. *Ann R Coll Surg Engl* 1987;69:110–2.
- [2] Henderson J, Goldacre MJ, Griffith M, Simmons HM. Day case surgery: geographical variation, trends and readmission rates. *J Epidemiol Community Health* 1989;43:301–5.
- [3] The Royal College of Surgeons of England. Report of the Working Party for the Commission on the Provision of Surgical Services. Chairman: Brendan Devlin H. Revised Edition, March 1992.
- [4] Natof HE. Complications associated with ambulatory surgery. *J Am Med Assoc* 1980;244:1116–8.
- [5] Johnson CD, Jarrett PEM. Admission to hospital after day case surgery. *Ann R Coll Surg Engl* 1990;72:225–8.
- [6] Wilkinson D., Bristow A., Higgins D. Morbidity following day surgery. *J One Day Surg* 1992;X:5–6.