

## Outpatient Operations. I—The Surgeon's View

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If we cannot have all the money we need to run a perfect health service we must make the best use of the money we have.

The advances in diagnosis and treatment all require a great increase in expenditure and tend to outstrip the limited national funds allocated to medicine. One way in which we can attempt to pay for improved facilities is to increase our productivity. How we spend the money allocated is governed by philosophical as well as ethical considerations, but I believe that we must explore the possibilities of reducing unnecessary and unessential hospital expenditure by not admitting to hospital patients who can equally well be treated as outpatients.

There is usually little justification for admitting a patient to hospital "for investigation." Many patients so admitted have tests that could be equally efficiently performed in the outpatient department. They may wait for days (with free board and lodging) while the results of the tests are evaluated or second opinions sought. The efficient use of good clinic facilities should allow almost all patients to be fully investigated as outpatients, except those who require strict metabolic balance.

### Productivity

The surgeon may improve his productivity (from the national financial point of view) by performing minor surgical procedures on outpatients. It is tradition more than necessity that dictates our present habits, and it is as well to consider these critically. Is a simple hernia repair more painful, more difficult, or more dangerous than are many dental extractions? I think not, yet tradition dictates that hernia cases remain in hospital. This habit springs from the days when it was felt that immobility was essential to prevent recurrence, that infection in a hernia wound was a disaster, and that an hour's anaesthetic was dangerous. There is, however, now good evidence in favour of early postoperative ambulation, and that the risk of infection of wounds is greater in hospital than outside. The recovery from anaesthesia is now much smoother and more rapid than it was at the time of the formulation of our traditional hernia care habits. Early discharge after hernia repair has been advocated by Aldridge (1965) and by Morris, Ward, and Handyside (1968), and outpatient operations have been practised successfully by Farquharson (1955) and Stephens and Dudley (1961).

I propose to outline my experience with outpatient surgery during the past four years. The experiment was forced on me by my being allotted only seven surgical beds, but I now believe that there are many advantages in the practice of outpatient surgery in selected cases.

What is minor surgery? There are two categories: clinic surgery and theatre surgery.

### Clinic Surgery

In a well-equipped outpatient clinic it is possible at the first consultation to perform the following simple procedures:

(1) Remove all skin and subcutaneous tissue lesions that can be conveniently dealt with under local anaesthesia.

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(2) Aspirate breast cysts. There has been recent controversy in the literature about this practice. However, this is a safe and justifiable procedure if performed by experienced surgeons and the patients are carefully followed (Patey, 1966; Welsh, 1966).

(3) Inject varicose veins. I am practising this technique to a limited extent as the primary treatment of varicose veins. There are, of course, those who claim excellent results with only outpatient injection treatment of varicose veins (Fegan, 1963).

Much minor anal and rectal surgery can be dealt with in an outpatient rectal clinic, including:

(4) Sigmoidoscopy and biopsy or fulguration of lesions within reach of the sigmoidoscope.

(5) Injection of pilonidal sinuses. The injection of pilonidal sinuses with pure phenol by the technique described by Maurice and Greenwood (1964) is ideal for outpatient practice. In the past four years I have injected 20 patients with pilonidal sinus and have had to admit only six for operative treatment.

(6) Treat many internal piles. Injection with 5% phenol was initially used, but now the technique of rubber-band ligation is more commonly used (Barron, 1963; Carden, 1967). Fifty patients have so far been treated by rubber-band ligation and reviewed (A. R. Groves and J. A. Williams, unpublished data, 1968).

(7) Stretch or perform sphincterotomy on patients with fissure-in-ano. This is usually a simple operation if performed under local or caudal anaesthesia.

I regularly practise all these forms of treatment in my primary consultation clinic. However, I think that these techniques must be the responsibility of the consultant, and should not be delegated to junior hospital staff. The techniques should, of course, be taught but not routinely delegated.

### Theatre Surgery

Minor surgery requiring full operating-room facilities includes herniorrhaphy, removal of large lipomata or foreign bodies, some simple procedures required in the management of varicose veins or haemorrhoids, and the excision of simple breast lumps with confirmation by frozen section of simplicity.

Any operation that is likely to be painful or is particularly prone to bleeding or haematoma formation is unsuitable for outpatient surgery, and in this category I would class haemorrhoidectomy, stripping of varicose veins, and possibly hydrocele operations.

It is important for all patients scheduled for outpatient operations to have an adequate preoperative examination. This includes a chest x-ray examination, haemoglobin, and full physical examination. At the time of the first consultation the blood test and x-ray examination are arranged and the patient is given the date to attend for the outpatient operation.

All outpatient operations are scheduled first on the list. After operation the patient is collected by a relative or friend, or sent home by ambulance at midday. They are given a letter and operation note for a relative to take round to the general practitioner's surgery. We also give the patient four 50-mg. pethidine tablets to take home for analgesia (and find they rarely need more than two).

If the operation or anaesthetic proves to be more difficult than expected facilities should be available to admit the patient. This "escape" has been used three times in the present series, the patients returning home after one or two days.

## Results

A list of outpatient operations performed in the past four years in the operating-theatre is shown in the Table.

Outpatient Operations		
Hernia	(Inguinal	60
	Femoral or umbilical ... ..	5
Breast	Segmental excision ... ..	32
Anus	Fissurotomy or polypectomy ... ..	6
Skin or subcutaneous	Large lipomata, node biopsy, etc. ... ..	19
Varicose veins	Saphenofemoral ligation or ligation of communicating vein ... ..	5

The two major groups are discussed in detail.

### Hernia Repair

The criteria for selection for outpatient operations are willingness of the patient to participate, recommendation by the general practitioner, age under 45, and absence of respiratory disease. During the past four years the proportion of patients operated on for hernia who have been treated as outpatients is 41% ; 159 patients have been operated on as inpatients and 65 as outpatients.

The technique of hernia repair has varied during the series. The simplest and most universally applicable technique has been removal or inversion of the hernial sac, transversalis fascia repair, and reinforcement of the posterior inguinal wall with a nylon mesh implant. The skin wounds are usually closed with fine subcuticular catgut so that there are no sutures to be removed.

There have been few complications of outpatient hernia repair. There has been no sepsis, but one haematoma sufficient to require evacuation. One patient developed serious post-operative chest infection. He was a 58-year-old man with some chronic bronchitis. He was unwisely selected early in the series before the criteria were defined. One other young patient developed a small pulmonary embolus on the fourth post-operative day. He was readmitted at once. There were signs of a deep venous thrombosis, and he was treated with anti-coagulants with complete resolution.

### Breast Lesions

It is my policy to aspirate breast cysts in the outpatient department and then to advise excision in those patients who have residual palpable or mammographic abnormality.

Many surgeons feel that wedge excisions of simple breast lumps are best performed on "inpatients," who return home on the first or second postoperative day. However, these patients are often young women with young children, and my belief in the advantages of not separating mothers and young children makes me feel that there is an important place for outpatient surgery.

It is, of course, important to advise outpatient operation only when the diagnosis of a benign lesion is almost certain. We now employ mammography universally, and, in selected patients, needle biopsy.

In a series of 33 outpatients operated on with a preoperative diagnosis of a benign lesion none have been shown to be malignant. All have had frozen section confirmation. It is usual to warn all patients that if the frozen section report showed the lump to be malignant immediate mastectomy would be performed and they would be admitted to hospital from the theatre. It is therefore important that the preoperative

examination should be as thorough as if the patient were in hospital. In addition to a thorough clinical examination, chest x-ray examination, haemoglobin estimation, and the storage of serum for blood cross-matching should be arranged.

I now believe that the diagnosis of a benign breast lesion can be made with such accuracy that it is not justifiable to subject all patients to the mental trauma of knowing that they might wake up having had their breast removed. For the rare unsuspected carcinoma it is better to arrange mastectomy at a second operation within 48 hours with no adverse effect on prognosis.

Since first operating on simple breast lumps as an outpatient procedure I have admitted for operation 63 patients with breast lumps ; 16 of these have proved to be benign. The only complication of the outpatient operations for breast lump has been one haematoma severe enough to warrant the patient returning to hospital for evacuation of the haematoma. This was an error of technique that occurred early in the series. It should be appreciated that outpatient surgery demands even more careful attention to haemostasis than do operations on patients remaining in hospital.

### Relation with the General Practitioner Service

The role of the general practitioner in this scheme is of paramount importance. It is he who is in the best position to assess the suitability of a patient for outpatient surgery. He must also be willing to visit the patient at home on the evening of the operation and at least once more afterwards.

In the subsequent review these patients have been asked if they would rather have had the operation as an outpatient or an inpatient, and all have been glad they had the outpatient operation.

The general practitioners involved in the trial have also been questioned and are uniformly in favour of the scheme. The views of two of them are reported in the paper which follows.

### Conclusions

Two of the most precious commodities in the National Health Service are money and nurses' time. There is an obvious saving in both these in the practice of outpatient surgery. If the patient is safe, comfortable, and in familiar surroundings for his convalescence this is also an important advantage. The price we have to pay for these advantages is general practitioners' time, increased organization in outpatient clinics, and careful surgery by experienced surgeons. I share the view of the general practitioners involved in this pilot study ; I believe that the advantages are worth the price. We can devote the money saved to better treatment of patients who really need hospital admission.

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