TALKING POINT

Orthopaedic audit—review of inpatient waiting lists

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Orthopaedic surgery has one of the largest waiting lists. This generates much passion, particularly as the patients often have remediable painful conditions. With 2400 patients awaiting elective orthopaedic surgery at the Royal Orthopaedic Hospital, Birmingham, every effort is made to avoid wastage of resources and promote efficient use of hospital beds and operating time. We try to avoid unnecessary distress to patients and their families by identifying medical contraindications to surgery before admission to hospital. To achieve this and maximise available resources we have developed a system of reviewing inpatient waiting lists by postal inquiry, along with reassessment and preoperative assessment clinics.

This paper reports the results of three separate parallel projects, based on an investigation of the waiting lists of three surgeons, whose average waiting times were five years, three years, and one year. It soon became clear that their respective needs would be best catered for by postal review and reassessment and preoperative assessment clinics. The three stages of the procedure is now operated in sequence on the same patients.

Methods

Patients were sent a questionnaire with a prepaid addressed envelope for their reply and were asked to indicate whether they wished to remain on the waiting list or not or whether they wanted to be reviewed in the outpatient clinic. Questionnaires were sent only to patients who had been on the waiting list for more than three years.

Patients were given an appointment to attend the outpatient department for clinical reappraisal. They were selected directly from those who had been on the waiting list for more than two years and also included those patients who had requested outpatient review in response to the postal questionnaire.

All patients approaching the top of the waiting list were given outpatient appointments at which they were examined, reassessed, given *x* ray examinations, and had blood and urine specimens taken. When declared fit patients were admitted for surgery within four to six weeks. The surgeons discussed with the anaesthetists those patients presenting with problems at the preoperative assessment clinics. Joint consultations have recently been started if the anaesthetist thinks that he would like to see the patient before admission.

Results

We sent out 300 postal questionnaires—with reminders sent to patients who did not reply—and 220 patients replied (73%). Of these, 85 requested removal from the waiting list, and 80 were removed because no reply was received. Eighty requested referral for outpatient review and 55 patients remained on the waiting list.

Two hundred and fifteen patients were given outpatient appointments for reassessment and of these, 162 (75%) were removed from the waiting list (table I), leaving 53 patients (25%) on it.

We reviewed 130 patients—40 men and 90 women. The average age of the patients was 53 (range 18 to 82) years and the average time on the waiting list until review was 54 weeks (range six to 130 weeks). Seventy patients (54%) were to undergo major surgery—that is, hip or knee replacements or major osteotomies—and 60 patients (40%) were booked for lesser procedures—for example, Keller arthroplasty, arthroscopy, removal of ganglia.

TABLE I—*Results of reassessment clinics*

Reason for removal from list	No of patients
Surgery not needed	86
Did not attend	39
Previously admitted	14
Treated privately	6
On another NHS orthopaedic waiting list	10
Died	3
Duplicate cards	2
Referred for further outpatient review	2
Total	162

TABLE II—*Alerting medical history*

Medical history	No of patients
Cardiovascular disease	35
Respiratory disease	9
Gastrointestinal disease	6
Urogenital disease	12
Varicose veins	10
Deep vein thrombosis and pulmonary embolism	5
Dermatological problem	1
Diabetes	6
Myxoedema	1
Psychological illness	2
Total	87

Eighty seven patients (67%) were noted to have a medical history of alerting events that should be taken into consideration when deciding about the risks of surgery and the need for precautions to lessen the risks of surgical and anaesthetic morbidity and mortality (table II).

Seventy eight patients (60%) were declared fit after their first visit to the preoperative assessment clinic and the results of their *x* ray examinations and blood and urine specimens had been studied. Of these, 52 (40%) were declared unfit for surgery (table III). Nine patients considered for major prosthetic surgery had dental sepsis requiring treatment before implant surgery. Five patients requiring lower limb surgery under tourniquet were on the contraceptive pill, which needed to be stopped for six weeks before operation. Two patients were taking specific antidepressant medication requiring change to alternative medication before anaesthesia and surgery.

Appropriate referrals for specialist opinion were made when necessary, but in many cases problems were brought to the attention of the family practitioner. For 11 of the patients

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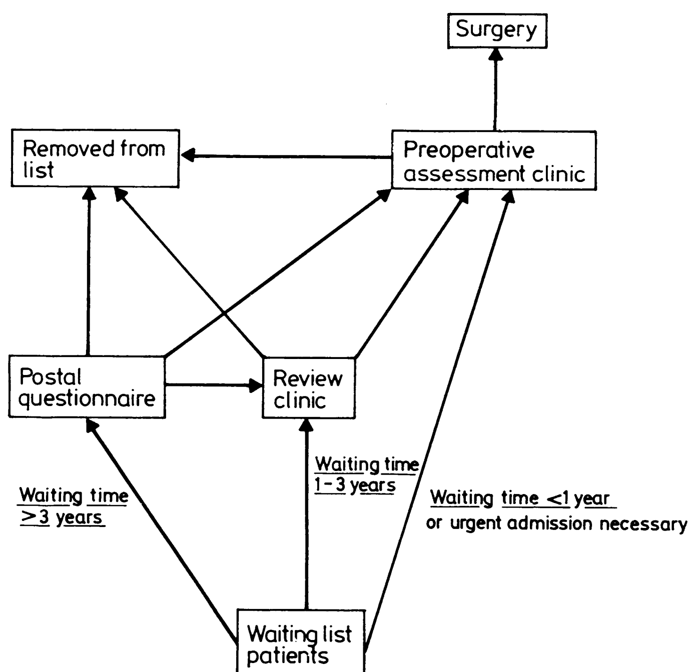

System of waiting list review.

TABLE III—*Patients considered unfit at preoperative assessment*

Reason for being unfit	No of patients
Cardiovascular disease	26
Respiratory disease	2
Gastrointestinal disease	2
Urogenital disease	3
Dermatological problem	1
Dental disease	9
Contraceptive pill	5
Antidepressants	2
Psychiatric illness	2
Total	52

initially considered unfit surgery was not indicated and nine patients remained unfit despite specialist referral. Twenty nine patients had the operation as planned, one had a different operation, and two patients decided against surgery.

Of the 78 patients initially declared fit at the preoperative review clinic, 57 had the operation planned, 13 no longer required surgery, and five had a different operation. When the surgical procedures were changed it was either because the patient's clinical state had changed or sometimes because the patient had been wrongly listed by an inexperienced junior doctor. With three patients it was necessary to fix a definite admission date because of impending holidays or examinations.

Discussion

The idea of some form of preoperative assessment dates almost from the start of the health service when Lee recommended that it was advisable for "those patients whom the surgeon thought might benefit."[1] Burn[2] and Frost[3] both reported the value of preoperative assessment, and the Duthie report dealt in depth with the problems of the long waiting lists for inpatient treatment.[4]

The results of the postal review, with 45% of the patients electing to remain on the waiting list, were similar to those reported by Donaldson *et al*, where 48% of patients wished to remian on the waiting list.[5] Donaldson *et al*, however, reviewed patients on the waiting list for over one year whereas this series reports postal review of patients waiting for over three years.

Williams *et al* reported 44% of patients unfit for surgery when examined in a preoperative assessment clinic, though the type of patients assessed were preselected by the surgeons as needing fitness assessment.[6] The figure of 40% of patients unfit in this series of consecutive patients at preoperative review is greater than that reported by Holdcroft, who found that around 10% of patients booked for general surgery were unfit when first screened.[7] The reason for this difference is likely to be multifactorial but it includes different assessment criteria—for example, the contraceptive pill and tourniquets, dental sepsis and metallic implants, different standards of assessment, and different standards of family practitioner care.

Postal review, reassessment clinics, and preoperative assessment clinics led to the removal of 55%, 75%, and 25% of patients from an orthopaedic surgical waiting list. When applying the three methods of review to general orthopaedic waiting lists half of the patients did not require surgery. The study suggests that in a hospital with long waiting lists postal review is most useful for patients who have been on the waiting list for more than three years. A review clinic is suitable for those patients waiting for one to two years, and the preoperative assessment clinic should certainly be used for patients undergoing major procedures and also for patients undergoing less serious procedures. A postal review is mainly a secretarial function and if undertaken in small numbers each week the time commitment for the secretary is small and the capital outlay minimal.

The patients for a review clinic may be seen at the end of an outpatient clinic or by arrangement with junior staff. Similarly, the preoperative assessment clinic may be absorbed into the end of an ordinary outpatient clinic without difficulty or undertaken at a more convenient time for the junior medical staff and the nursing staff. The amount of time taken is fairly small as is the demand on staff to run such a clinic. The advantages, however, are considerable: shorter ward rounds, fuller operating lists, fewer postoperative problems, fewer wasted admissions, and better use of scheduled operating theatre time.

I should like to thank Mr M H M Harrison, consultant orthopaedic surgeon, for his help in preparing this paper.

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(*Accepted 4 June 1985*)

THIRTY YEARS AGO

Fellowship for freedom in medicine
The Ban on Heroin

Dr. A. H. DOUTHWAITE moved a resolution urging the Home Secretary to reverse his decision prohibiting the manufacture of heroin. Heroin, he said, was of the greatest value in the treatment of some medical conditions, and the ban on its manufacture would serve no useful purpose in this country or elsewhere. He mentioned that the staff of eleven large teaching hospitals had written to the Home Secretary urging that the ban be withdrawn. The impression had been given in the House of Lords that the vast majority of the medical profession approved of the ban. That was not the case. Heroin addiction was not a problem in this country, but he was afraid it would become one if the manufacture of the drug was driven underground.

The resolution was carried unanimously. (*British Medical Journal* 1955;ii:130.)