

Five years' experience of oral day surgery

M Greenwood, J P Rood, A T Snowdon

¹Department of Oral and Maxillofacial Medicine and Surgery, Manchester Royal Infirmary, Manchester, UK

Many oral surgical cases are ideal for management on a day case basis. The Manchester Royal Infirmary Oral Surgery Day Case Unit was opened in July 1987 and has been instrumental in reducing inpatient waiting lists and improving facilities for teaching undergraduate and post-graduate students. The rapid turnover of patients has improved facilities for research, and nurse education and development have been fundamental to the development of the Unit. Patient feedback has been very positive and the Unit has proved to be an important part of the wider service offered by a busy Oral and Maxillofacial Department.

Key words: Oral surgery, day surgery

A significant number of dental or oral surgical procedures have been undertaken as day cases for many years, most of which being minor procedures under sedation with local analgesia or simple dental extractions under general anaesthesia. Developments mainly in anaesthetic techniques and drugs have made it possible to extend the range of surgery to include dento-alveolar procedures.

The Manchester Royal Infirmary Oral Surgery Day Case Unit opened in July 1987 with a number of aims, the principal ones being to reduce inpatient waiting lists, promote nursing education and development and to improve facilities for research.

The concentration of selected patients requiring routine procedures into the day case unit has provided an environment where these objectives have been achieved.

Effect on waiting lists

Over 70% of patients requiring a general anaesthetic can now be treated as day case. Of these 72% of cases consist of removal of third molars.

For most surgical treatment the patients wait on extensive lists which do not reduce in length. Day case surgery in Manchester has had a considerable effect on the length of inpatient waiting lists for routine procedures since the unit provided an 'alternative channel' and not a substitute for inpatient care¹.

The waiting list in the Department of Oral and Maxillofacial Surgery in Manchester in September 1984 was just over 400 cases. In September 1985, after a rigorous validation of the list which resulted in the removal of over 50 cases, the number remained at 403. In reality this indicated that the waiting list was increasing. During this validation it was revealed that patients suitable for day-case management constituted 45% of the inpatient waiting list (about 180 of the cases awaiting admission at that time). The rate of admission of this group of patients was slow due to the high referral and admission of patients requiring complex oral and maxillofacial procedures, e.g. correction of facial deformities, head and neck cancer surgery.

Figure 1 represents the inpatient waiting lists from September 1984 to September 1992 which increased during 1985 and 1986 and reached a peak in July 1987, which co-incidentally was the month in which the day case facility opened. Since that time there has been a steady reduction in the numbers of patients waiting for routine types of oral surgery procedures.

By September 1992, the number of patients awaiting inpatient surgery had dropped to about 160. It was also noted that the patients remaining on the inpatient list are those for whom an overnight hospital bed is essential either because of the nature of the surgery or because of social circumstances.

The range of procedures undertaken on the Unit, ranging from dental extractions to the correction of nasal and malar fractures is as follows.

- (1) Excision of uncomplicated impacted teeth and buried roots.
- (2) Exposure of unerupted teeth for orthodontic treatment.

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Correspondence and reprint requests to: Mr M. Greenwood, Department of Oral and Maxillofacial Medicine and Surgery, Manchester Royal Infirmary, Oxford Road, Manchester M13 9WL, UK

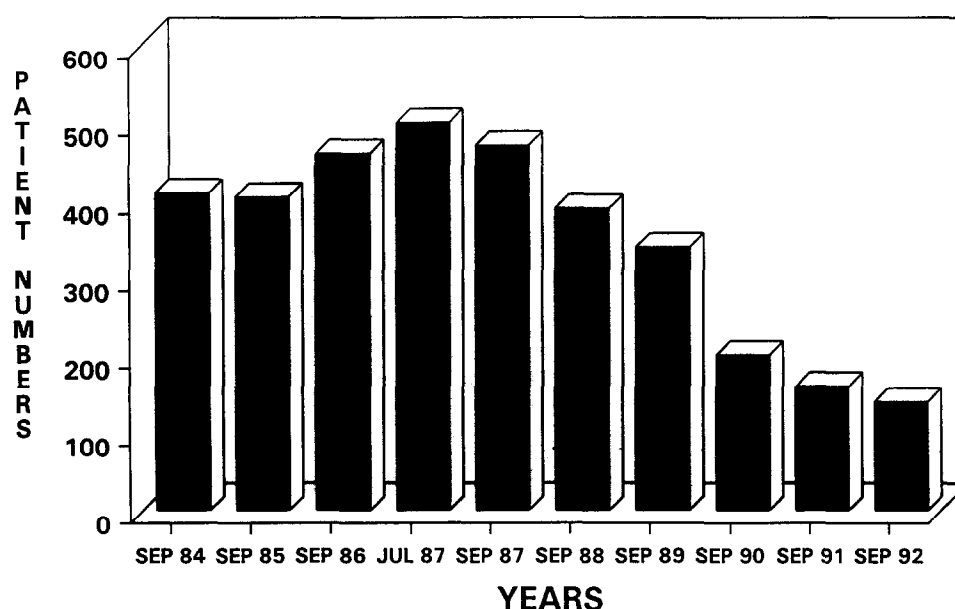


Figure 1. Changes in inpatient waiting list from September 1984 to September 1992.

- (3) Biopsy of hard and soft tissues.
- (4) Enucleation of small cysts.
- (5) Division of pedicles.
- (6) Removal of bone plates and wires.
- (7) Minor soft tissue surgery.
- (8) EUA for suspected malignancy.
- (9) Cryo-blockade of peripheral nerves.
- (10) Laser and cryo-surgery of small lesions.
- (11) Reduction of nasal and malar fractures.
- (12) TMJ arthroscopy.
- (13) Salivary ductoplasty and removal of calculi.

Teaching development

The concentration of those patients requiring dento-alveolar procedures into one area has allowed the development of a specific teaching module for undergraduates whereby their exposure to clinical surgery has been greatly increased. Early in their clinical training, students are allocated to teaching sessions on the Unit where they can acquire and practice simple clinical procedures such as monitoring of blood pressure and pulse and familiarize themselves with recovery and resuscitation procedures. Exposure to the 'live' clinical situation brings the student an added awareness of the importance of these clinical skills early in their training. During this course students are introduced to surgical procedures with the added advantage of being able to learn techniques on patients who are anaesthetized. Later in the course students attend the Day Case Unit regularly for further clinical surgical practice.

For the postgraduate junior oral surgery staff members the Day Case Unit offers a unique ability to operate regularly on a large number of patients requiring routine dento-alveolar surgery; this, together with the close supervision given by the senior surgeon on the list, allows a high degree of surgical skill to be developed in

these basic techniques of oral surgery. Since students are attached to every operating list for the instruction, junior members of staff are encouraged to develop their teaching methods under supervision. Naturally the time invested in clinical teaching reduces the throughput, but this is accepted as an inevitable consequence of this valuable activity.

Research

A number of projects have been undertaken by both the clinical and nursing staff helped significantly by the rapid turnover of cases, many of which are of a similar nature (e.g. 72% of cases involved third molar surgery as mentioned earlier).

Projects which have been undertaken have been mainly in the areas of anaesthesia and analgesia, but have also included studies on nerve injury.

Promotion of nurse education and development

The nurses have always had a pivotal role within the unit, and are required to have a range of skills². They have always made a major contribution to the assessment of patients prior to surgery and post surgery and are involved in patient preparation on the day of surgery itself. The nurses are also responsible for setting up theatre and assisting in the anaesthetic room. In all relevant areas the nursing staff have been made responsible for setting and maintaining standards and have regular audit meetings. Formal teaching is required to achieve the standard of nurse education required and senior nurses in the field have promoted the establishment of the nationally recognized course-ENB A21-to which it is hoped that this unit will be making a contribution.

As well as supporting clinical research, nursing

Table 1. Opinions of 200 patients on various aspects of the day case service; the questionnaire was presented in the form shown, with patients requested to tick the appropriate opinion of the various aspects

	Day Case Unit – quality rating				
	Excellent (%)	Good (%)	Fair (%)	Poor (%)	Very poor (%)
(1) Ease of parking*	0	14	18	30	28
(2) Overall attitude of clinician at original consultation, on the ward, and at review	72	28	0	0	0
(3) Overall attitude of the nursing staff at original consultation, on the ward and at review	18	58	24	0	0
(4) Attitude of other staff	24	74	2	0	0
(5) Adequacy/convenience of given operation date	58	36	4	2	0
(6) Care on the day case ward	50	40	8	2	0
(7) Privacy	38	36	18	6	2
(8) Adequacy of information	50	36	12	2	0
(9) Aftercare	20	42	36	2	0
(10) Adequacy of postoperative pain control	34	42	22	2	0
(11) Overall satisfaction	28	52	18	2	0

*Ten per cent of patients did not need to utilize a parking facility and question one was therefore not applicable

standards and policy have been research based, e.g. discharge criteria, knowledge of incidence and nature of postoperative morbidity and pain management.

Patients' opinions

Two questionnaires were distributed to patients who had undergone care in the Unit just after being formally discharged at the review appointment³. The questionnaires were based on similar documents designed by the Audit Commission in the UK for the evaluation of day case surgery^{4,5}. Two hundred patients were chosen sequentially over a 3 month period. It was considered that 200 would be representative of opinion.

Questionnaire 1

Patients were generally satisfied with their overall experience of day surgery (80% rating the latter as excellent or good); see Table 1.

The biggest area of contention was the large number of people who were dissatisfied with facilities for parking – 58% rating this as poor or very poor. Hospital developments have since lead to an improvement in parking facilities. Dissatisfaction with the latter is important as difficulties can lead to lateness and failed appointments; this is also often the first experience the patient has of the hospital referral and frequently leads to frustration and increased anxiety.

Questionnaire 2

The second questionnaire (Table 2) was also distributed to the same group of patients to assess their attitudes to day case surgery in general. Less disruption to routine appeared to be the most popular reason for opting for day case surgery (35%). Fifteen per cent regarded the shorter waiting list as the most important factor.

Conclusions

Looking to the future, it is hoped that in the next few months the Unit will no longer have to share facilities

Table 2. The factors patients considered to be the most important consideration with regard to day surgery, from the list provided; only one opinion was allowed.

	n	%
Less disruptive to routine	70	35.0
Prefer to recover at home	28	14.0
Shorter waiting list	30	15.0
Saves NHS costs	7	3.5
Insufficient medical/nursing care at home	4	2.0
Lack of adequate pain relief	20	10.0
Extra pressure on family routine	3	1.5
Lack of rest at home after operation	11	5.5
No disadvantages overall compared to other modes of treatment	27	13.5

n = 200

since it is planned that the unit will be housed in dedicated facilities. It is envisaged that both undergraduate and postgraduate teaching, together with nurse education, will be enhanced further.

In general terms the initial aims of the Oral Surgery Day Case Unit have been realized. The aim for the future must be to expand and develop on these achievements.

References

- 1 Dudley HAF. Queuing Theory and the Waiting List. Commission on the Provision of Surgical Services: Guidelines for Day Case Surgery. Royal College of Surgeons of England, 1985.
- 2 Snowdon, AT. In Healy TEJ (ed) *Baillieres Clinical Anaesthesiology* 1990; Vol 4, No 3, Chapter 11
- 3 Greenwood M. Patients' opinions of oral day surgery. *Br Dent J* (in press)
- 4 Audit Commission of Local Authorities and the National Health Services in England and Wales. HMSO, London 1990
- 5 Audit Commission NHS occasional papers: Measuring quality: the patient's view of day surgery. HMSO, London 1991