

Day-case oral and maxillofacial surgery in a Nigerian district general hospital: scope and limitations

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Day-case surgery is becoming attractive worldwide to various surgical specialties, but there are few reports from West Africa.

Between January 1987 and January 1997, 2980 patients who attended an oral and maxillofacial unit were operated on as day cases. This represents 65% of the 4585 patients who had oral and maxillofacial surgery during this period. Of these patients, 362 (12.15%) had general anaesthesia, while 2618 (87.85%) accepted local anaesthesia.

Readmission is a failure of day-case surgery. In this series, it was due to bleeding in 80 of 102 cases of excision of submandibular salivary gland adenoma.

We believe that day-case oral and maxillofacial surgery is safe and effective, but that caution should be exercised when operating on benign submandibular salivary gland neoplasms under general anaesthesia.

Day-case surgery is well established within hospital practice in many nations with highly developed health systems, such as the United Kingdom, Canada, United States, Australia, Denmark, Ireland and China (1). The Council of The Royal College of Surgeons of England recommends that day-case surgery, as set out in its guidelines, is a safe and proper procedure (2). The benefits of this procedure are reduction in costs, reduction in surgical waiting lists, and reduction in morbidity owing to early ambulation (3).

Various surgical specialties are now embracing day-case surgery throughout the world. These include ophthalmology, ENT, general surgery, plastic surgery and orthopae-

dic surgery. Many operations are performed satisfactorily as day cases in developing countries, but there are few or no comprehensive reports in the literature of its acceptability among various specialties, particularly oral and maxillofacial surgery. This paper reviews our experience over 10 years on the scope and limitations of day-case maxillofacial surgery in a Nigerian district general hospital in Lagos.

Methods

The day-case unit for oral and maxillofacial surgery opened in 1987 when a minor operating theatre was established near the oral surgery outpatients and separate from the two general operating theatres shared by all surgical specialties. Since its inception, the unit operates 4 days a week.

The unit is staffed with one consultant with three residents, two staff nurses, one nursing sister and a matron in the day ward. Each session lasts from 0800 to 1900.

After examination, those patients with cardiopulmonary problems, diabetes or a history of alcoholism with hepatomegaly were excluded from day-case treatment. All the patients were initially assessed by a consultant. The feasibility and benefits of day-case treatment were explained to each patient. Transportation to and from hospital, help at home and, where applicable, care of the children, were discussed. Haemoglobin level was obtained for each patient and a chest radiograph was taken for patients undergoing general anaesthesia.

On the day of surgery, the patients were carefully reviewed; those undergoing general anaesthesia by a consultant anaesthetist. No premedication was given. All operations performed under general anaesthesia were carried out early in the morning and were of short

Table I. Range of maxillofacial surgery

	No.	(%)
1 Simple mandibular fractures	1158	(36.86)
2 Incision biopsy of malignancies	450	(15.10)
3 Extraction of impacted teeth	320	(10.74)
4 Excision of mucocele and lipomas	300	(10.07)
5 Exposure of unerupted teeth for orthodontic treatment	240	(8.05)
6 Adult unilateral cleft lip	200	(6.71)
7 Excision of submandibular salivary gland adenoma	102	(3.42)
8 Salivary ductoplasty and removal of calculi	80	(2.69)
9 Excision of dermoid cysts below the mylohyoid muscle	80	(2.69)
10 EUA for suspected intraoral malignancies	50	(1.68)
Total	2980	(100)

EUA = Examination under anaesthesia

Table II. Type of anaesthesia

	No.	Local anaesthesia	General anaesthesia
1 Simple mandibular fractures	1158	1158	—
2 Incisional biopsy of malignancies	450	400	50
3 Extraction of impacted teeth	320	320	—
4 Excision of mucocele and lipomas	300	300	—
5 Exposure of unerupted teeth for orthodontic treatment	240	240	—
6 Adult unilateral cleft lip	200	120	80
7 Excision of submandibular salivary gland adenoma	102	—	102
8 Salivary ductoplasty and removal of calculi	80	—	80
9 Excision of dermoid cysts below the mylohyoid muscle	80	80	—
10 EUA for suspected intraoral malignancies	50	—	50
Total	2980	2618 (87.85%)	362 (12.15%)

duration, lasting not more than 60 min so as to allow adequate recovery before discharge from the day ward.

Absorbable subcuticular sutures were used to avoid the need for suture removal. Because of the nature of our environment, all patients were given 25 tablets of Optalgin® and Ampiclox® 500 mg four times a day for 7 days and written instructions which stated:

- 1 Not to drive a vehicle within 25–48 h.
- 2 To report to the casualty department in cases of persistent vomiting or bleeding.
- 3 Not to sign any legal document if treated under general anaesthesia until 48 h postoperatively.
- 4 To report to the maxillofacial unit 7 days postoperatively for review.

Results

Between January 1987 and January 1997, 4585 patients were treated at the Maxillofacial Unit of the General Hospital, Lagos. All patients lived within 20 km of the hospital. Of these patients, 2980 (65%) were treated as day cases. The various types of cases treated and the anaesthesia employed are detailed in Table I and Table II. All the patients were adults within the age range 18–65 years.

Table III shows the complications that arose, including the need for readmission of 80 (2.68%) patients.

Discussion

There are few reports in the English literature from surgical specialties in West Africa evaluating the importance of day-case surgery. In our series of 4585 patients seen and operated on at the oral and maxillofacial unit over a period of 10 years, 2980 (65%) procedures were performed on a day-case basis. This represents cost savings for both the patient and the hospital. It reduced drastically our main operation list over the same period as well as the psychological burden of hospitalisation for the patients.

Our readmission rate of 2.68%, although higher than the 1.34% and 0.12% reported in two large series (4,5), is

Table III. Postoperative complications

Complications	No (%)
Wound breakdown	40 (1.34)
Bleeding	120 (4.03)
Infection	240 (8.05)
Readmission	80 (2.68)

less than the 5% reported in another series (6) and is within the range of 2–3% accepted by The Royal College of Surgeons in England (2). The high rate of readmission in our series was due largely to bleeding that occurred in 78% of the 102 patients who had excision of a submandibular salivary gland adenoma performed under general anaesthesia.

We agree with other authors (6–8) that detailed assessment of the general health and social surroundings of patients will uncover factors which will preclude day-case surgery, such as long distance between home and hospital, lack of home support and inadequate communication facilities should the need arise to contact the hospital. If not adequately considered for each patient these factors will affect the readmission rate.

The low rate of infection in this series is due to scrupulous aseptic procedures; wound breakdown is low because of careful surgical technique and drainage of wounds where necessary.

From this experience, we believe that day-case oral and maxillofacial surgery in West Africa is safe and effective.

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