Prophylaxis and management of postoperative problems

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The perception by patients of complications occurring in the postoperative period following anaesthesia for outpatient surgery is different than following anaesthesia for inpatient surgery. The reason for this is the fact that generally there is little pain involved in outpatient surgery, causing patients to focus their attention on areas which would not interest them after major painful surgery. In our department, we looked at the complications occurring in two groups of patients, those having dental surgery and those having gynaecological surgery (mainly therapeutic abortions)¹ (See Table). One is struck immediately by the high incidence of these complaints and also by the fact that these complications, in almost all cases, are not life-threatening. On the other hand, they obviously have been disturbing and some attempt should be made to decrease their incidence provided that the therapy does not produce side-effects that are worse than the original problem.

The objectives of outpatient anaesthesia include safe technique, adequate analgesia and amnesia, and few anaesthesia related side effects.² Certain fundamental procedures will ensure that these objectives, particularly the latter, are met.

Prevention of serious respiratory and circulatory complications

These complications can be prevented by choosing patients and procedures carefully. This has already been addressed elsewhere in this symposium. In our practice only ASA physical status I or II patients are operated on as outpatients. We insist on the same preoperative work-up as our inpatients receive and we follow the same monitoring principles. It is absolutely fundamental that outpatients are treated with the same respect as inpatients. Furthermore, severe complications can be prevented by adequate discharge criteria. These criteria should include absence of postural hypotension and arrhythmias and

of complaints referable to the cardiorespiratory system. The patients must be assessed by an anaesthetist before discharge.

Prevention of common postoperative problems

Many patient complaints can be avoided if the anaesthetist ensures that the patient's expectations are reasonable. If the patient is told "you will have no problems postoperatively" he will expect this and if he is told that he may feel dizzy for awhile, or be nauseated or have a slight sore throat etc. but that these complications are minor and shortlived he will accept them and they will not take on major significance. Also, techniques that ensure early arousal will decrease the incidence and severity of many minor side effects, especially dizziness.³ There are certain specific minor side effects that require comment.

Nausea and vomiting

We feel nausea and vomiting are unfortunately almost a necessary accompaniment of anaesthesia in some patients. However, several points should be made. First, inflation of the stomach should be avoided by adequate airway management. Second, postoperative narcotics should be avoided. Thirdly, the patient should be made aware that the problem is self-limiting. Finally, "mini-dose" droperidol is useful if the problem becomes major.⁴

Sore throat

In the outpatient setting sore throat is almost exclusively associated with tracheal intubation, therefore the indications for intubation should be strictly adhered to. In many instances, regional anaesthesia will allow surgery to proceed without

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TABLE Postoperative complications

	<i>Dental patients (100)</i>	<i>Gynaecological patients (250)</i>
<i>Early complications</i>	<i>(Percentage of patients with complaints)</i>	<i>(Percentage of patients with complaints)</i>
Dizziness	46	35.2
Nausea and vomiting	17	10.8
Late arousal (>3 hrs.)	10	1.6
Headache	8	6.8
Airway obstruction	1	0
Joint pain	1	0
Hypertension	1	0
Arrhythmia	1	0
Hypotension	1	0
Sore Throat	1	0
	59%	Total* 40%

	<i>Dental patients (100)</i>	<i>Gynaecological patients (210)</i>
<i>Late complications</i>	<i>(Percentage of patients with complaints)</i>	<i>(Percentage of patients with complaints)</i>
Dizziness	46	32.5
Nausea and vomiting	35	13.2
Headache	26	16.8
Sore arm	23	32.8
Sore throat	69	5.6
Muscle pain or weakness	12	1.6
Depressed or crying	3	0.4
Awareness	1	0
Confusion	1	0.4
	90%	Total* 66%

*Some patients had more than one complaint, therefore total complaints exceed number of patients with complaints

tracheal intubation. If intubation is deemed necessary, the use of high pressure, low volume cuffs will decrease the incidence of sore throat.⁵ Also, humidification of anaesthetic gases and postoperative humidity will decrease the incidence.⁶ Once the patient is well awake, analgesic lozenges will help.

Muscle pain

Care must be taken in intraoperative positioning to avoid pressure on the arms and legs and to prevent undue stretching of muscles, ligaments, nerve plexuses etc. If tracheal intubation is required, succinylcholine should be preceded by a small dose of curare or gallamine to prevent fasciculation which has been implicated in the genesis of post-depolarizing relaxant muscle pain.⁷ Diazepam has also been suggested for this use⁸ but its long-acting

depressant nature makes it an unattractive drug in outpatients.

Other considerations

The most important factor in preventing patient discomfort and complaint while ensuring patient safety is, in my opinion, the discharge of patients only when they are "street-fit." In our facility, we follow the following sequence. When the patient is awake and able to carry on an intelligent conversation, they are allowed to drink clear fluids. When these are tolerated, they are allowed to sit and then stand. When they can stand without dizziness with their eyes closed, and are not unsteady when walking with their eyes closed, we feel they are ready to be discharged home. However, they must be accompanied home by a responsible person. We

do not accept patients for outpatient surgery who live out of easy access to our hospital. To prevent any further complications from becoming serious at home, we give all our patients the following advice: do not drink alcohol and do not drive until the day following surgery. Also, do not make any major decisions for 48 hours. If you have a problem, please call us. This simple advice we hope will prevent postoperative disasters from occurring.

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