### PREMEDICATION IN NASAL SURGERY

# J. M. Montserrat-Viladiu, Barcelona, Spain

As a rule the surgeon, when working under general anaesthesia, will leave the responsibility of both the anaesthesia and the premedication in the hands of the anaesthesiologist. However when the anaesthesia is given locally, the anaesthesiologist is only an appreciated collaborator in the case of an emergency.

In Spain as in the anglosaxon countries the demand for general anaesthesia from the side of the patients in operations that formerly were performed under local anaesthesia is strongly increasing.

Consequently we rhinosurgeons must be able to rely on anaesthesiologists who are familiar with the problems of nasal surgery.

In the concept of giving premedication there are two aspects of paramount importance. First the one related to the patient. And second the one related to the collaboration with the anaesthesiologist.

Where the patient is concerned we may say that, since premedication has the goal of reaching a better anaesthesia, the first thing the surgeon can do is to tranquillize the patient: a brief explanation of what the operation is going to be, is very helpful for the patient having a normal mental condition and an average intelligence. We even have the habit of making some comments on the possibility of complications while at the same time describing the ways to combat them. During that interview we talk about the anaesthesiologist that will be in charge and we try to induce the idea that this specialist is very competent and that we trust in him. Then, the day before the operation when the patient comes into the clinic, we personally introduce the anaesthesiologist and we make purposely some superficial comments to our colleague on the coming operation. This to show the patient that the person who will temporarily dislodge his personality from present reality knows his case, understands it and will act accordingly.

The second aspect is the one related with the anaesthesiologist. We discuss together the most relevant data of the clinical history, and specially we try to point out the technical difficulties and surgical demands that may be involved in that specific case.

Premedication in nasal surgery is meant to avoid the anxiety and in such a way to assist in a better induction to anaesthesia. Furthermore it serves to alleviate hemorrhage, oedema and to shorten the duration of the surgical act.

There is a clear interdependence among all these aims since a better anaesthesia means less excitation and therefore less bleeding and also, sometimes

less oedema. Hence, premedication is oriented towards obtaining such a better induction and towards an efficient supporting of the anaesthesia.

One can divide the premedication in two seperate parts: the one on the night before the operation and the other on the morning of the operating day.

The night before the operation — in order to tranquillize the patient — we shall give him a hypnotic sedative such as phenergan or an anxiolitic drug such as diazepan or clordiazepoxid. At the same time we shall prescribe an antihemorrhagic agent that acts on the capillary vessels such as adenochromic semicarbazone and a coagulant that acts by means of the enzymatic process of fibrolysine such as E-aminocaproic acid.

It is important to bear in mind that when talking to the anaesthesiologist, who is not especially familiar with our speciality, we must tell him that the patient should not have a hemorrhage or a tendency to extravasation.

In view of this we often prescribe 5-10 mg, of aescina and 20.000 or 40.000 U, of proteolotic enzymes.

On the operating day, one or two hours before the intervention we shall inject a neuroleptic as for instance 5 mg. haloperidol.

With this we obtain a splanchnic vasodilatation which later will give us a more bloodless surgical field; at the same time it acts as an antiaemetic. We add to this a strong analgesic such as dolantine. In case the patient is excited it is advisable to repeat the valium diazepan dose if it is an adult or give a dose of 50 mg. luminal if it is a child.

When the operation is going to be very short we only give the haloperidol and we do not combine it with dolantine. This is to obtain a fast waking up and early regain of the pharyngeal reflexes. In these cases it is preferable to administer 400 mg. of meprobamate combined with a barbiturate such as seconal in doses of 75-100 mg. for an adult or half of it for a child.

If the patient is going to be operated upon late in the morning, we should give him a 10 mg. dose of valium to tranquillize the patient until operating time. We may also repeat the premedication in order to lessen bleeding and oedema.

In extensive rhinological operations, especially in those dealing with nasosinusal tumors where patients often have had already several considerable hemorrhages we must study the hematology and above all, treat a possible anemia before taking the patient to the operating room. We also have to study

#### Night before

To tranquillize
25 mg. phenergan
(promethazine)
25 mg. librium
(clordiazepoxid)
10 mg. valium (diazepan)
(Not for cardiopathics)
All per os.

For local anaesthesia 100 mg. seconal 121/<sub>2</sub> mg. phenergan All per os. Bleeding
5 mg. monosemicarbazonadrenocrom i.m.
4 gr. E-aminocapriocacid i.v.
Not in cases of
nephropathy

Oedema
12 a.m.
5 mg. aescina i.v.
9 p.m.
20.000 - 40.000
u./proteolitic
enzimes, p.o.

## Morning of the operation day

To tranquillize to operate early 1 hour before operation 5 mg. haloperidol i.m. with 50-100 mg. dolantine

To operate late
Early in the morning
10 mg. valium (diazepan)
(children luminal 50 mg.)
1 hour before operation
5 mg. haloperidol i.m. with
50-100 mg. dolantine

Short operation ½ hour before operation 5 mg. haloperidol i.m. 400 mg. meprobamate, p.o. with 75-100 mg. seconal (secobarbital) p.o. (children halfdose)

For local anaesthesia  $\frac{1}{2}$  hour before operation 250-500 mg. veronal  $\frac{12}{2}$  mg. phenergan 15 mg. compazine i.m. 100 mg. demerol i.m.

Bleeding
1 hour before operation
4 gr. E-aminocaproic-acid
i.v.
100 mg i m\_amcha

100 mg. i.m., amcha5 mg. monosemicarbazonandrenocrom i.m.1 U. Klobusitzky i.m.

#### Oedema

1 hour before operation 20.000-40.000 u/ proteolitics enzymes 5 mg. aescina i.v.

the plasmatic proteins and we have to normalize them beforehand as far as we can by the administration of seroalbumines. We sometimes also prescribe 1 U of Klobusitzky, coagulant enzyme.

Children form a special group. The psychological effect of surgery on them may be more important than on an adult. The physician will obtain the childs confidence more easily if he never deceives him and if he avoids painful explorations. It is preferable to have the child undergo an intense sedation for instance with 5 mg. valium i.m. and then carry out in one single session all the explorations which can be painful. Concerning the premedication proper we prescribe the same drugs as for an adult, obviously with the necessary corrections in view of age and weight of the child.

Very special attention should be paid to alcoholic, diabetic and cardiopathic patients. The alcoholic generally requires the haloperidol-dolantine-cocktail assisted by anthistaminics such as phenergan in a 25-50 mg. dose which can be repeated 8-10 hours later. Even well-regulated diabetics will be given antibiotics starting 48 hours in advance.

Cardiopathic patients will have a premedication adapted to their state of compensation and under the direction of their cardiologist. By the same taken in the case of alcoholics and diabetics, we will first hear the psychiatrist and the endocrinologist in order to have their orientation on the premedication and the anaesthesia.

In those cases in which a local anaesthesia is going to be used we give seconal 100 mg. and phenergan 12,5 mg. the night before. It is useful to re-

enforce this action one hour before the operation next morning with veronal 250-500 mg. and phenergan 12,5 mg. adding a 15 mg. dose of compazine and a 100 mg. dose of demerol when entering the operating room. This premedication which is one of the Cottle-school also includes 15 mg. of compazine i.m. when starting the operation.

Here is where premedication ends but in spite of its apparent modesty it is an important factor in the success of the surgical act.

### RÉSUMÉ

La relation entre le chirurgien et le malade est objet d'un commentaire qui a surtout trait à la nécessité de tranquilliser le patient. Ceci est également important avec une anesthésie locale ou avec une anesthésie générale. Dans ce dernier cas l'action psychique doit être transféree en partie à l'anesthésiste. Quant à la prémédication elle-même il faut non seulement tranquilliser le malade pour obtenir une meilleur induction de l'anesthésie, mais aussi prévenir dans la mesure du possible l'hémorrhagie et l'oedéma. À cet objet, la veille de l'opération il est convenable de donner un hypnothique sédant (phénergan) ou un anxiolitique. En même temps, il faut ordonner un antihémorrhagique qui ait une action sur les vaisseaux capillaires ou sur les processus enzymathiques de la coagulation. Contre l'oedéma on peut ordonner des enzymes prothéolitiques et de l'aescine, substance qui agît sur la membrane cellulaire pour aider l'absorption de liquides.

Le jour même de l'opération on répète la même médication en ajoutant un neuroleptique tel que l'halopéridol et un analgésique fort comme par exemple la dolentine.

Ches les enfants et chez les malades chroniques (diabéthiques, cardiaques, etc.) il faut tenir compte des contraindications et modifier les doses.

Gerona 131, Barcelona 9, Spain.