From the Editors Desk:

Introduction to Day Care Anaesthesia:

Anaesthesia plays the most important part in the success of One-day surgery. The shorter the anaesthesia, lesser the complications, faster the recovery. Most surgeons, who practice One-day Surgery, would want to safely discharge their patient on the same day.

No surgery is possible without anaesthesia. The choice of anaesthesia depends on the nature & type of surgery, the status of the patient and the surgeons.

Over the decades, there has been tremendous advancement in anaesthesia. Availability of newer drugs & improvement in the delivery system by means of superior anaesthetic machines, which monitor as well as provide anaesthesia, has boosted its importance. The newer drugs are so precise, that the patient is awake almost as soon as the surgery is over.

History

The term 'anaesthesia' is said to be a rough derivative of the effect of ether. Plato in the fourth century B.C., was credited with describing the effect of anaesthesia as 'a condition in which an impulse is not transmitted to or announced to the brain'.

18th Century has seen the discovery and use of anaesthetic drugs, the derivatives of which, we are still using.

The first Inhalation gas, the famous 'Laughing gas'-Nitrous oxide and Ether, were used as early as 1772 and 1842.

Ether, was used to anaesthetise a patient, who successful underwent removal of a tumour from his neck in 1849.

The most interesting piece of history is related to local anaesthesia, which is now the most widely used, it was derived from cocaine!

Decoction made from boiling coca leaves, was used, after sterilisation, for the first time in 1892. This was cocaine at its best.

Discussion

Most surgeons dislike the prospect of operating on a conscious patient, where as, most patient become anxious with the prospect of being operated under general anaesthesia!

Choice on the type of anaesthesia is dependent on the type and nature of surgery, patient and surgeons comfort. While it is understood that certain surgeries require specific type of anaesthesia, most can be done under regional, or local anaesthesia.

Local anaesthesia, be it for dental extraction, or a complex regional block for Thyroid surgery, would be considered to be the safest type of anaesthesia, from the recovery of the patients point of view.

Just give a thought to the effects and side effects of general anaesthesia, the body is totally paralysed and artificially controlled by the anaesthetist, the drugs and the machines. The patient recovers to symptoms of breathing difficulty, nausea, retching, vomiting, and stupor. Which means, requiring extensive monitoring, by the hospital staff, relatives or monitors. Sometimes, necessitate all the three! It also requires a patient to be 'nil-by-mouth' for at least 6 to 8 hrs.
Spinal or epidural anaesthesia, are regional anaesthesia, only the lower half of the patient is paralysed. Spinal anaesthesia is moderately better than general anaesthesia. The important drawbacks are transient hypotension, requiring IV fluids, ‘Spinal Headache’, requiring a head low position for at least 8 hrs postoperatively, paralysis of the lower limbs (Which can be very unnerving to the patient). But, compared to general anaesthesia, it is better, recovery wise.

Epidural anaesthesia requires a highly skilled anaesthetist. It is more specific, blocking the ‘sensory’ part of our body, leaving the ‘motor’ functions normal. Here, we become more specific, in the sense, that the effect of general paralysis of your system is minimal, thus, more safe and affords faster recovery.

To my mind, regional blocks, are the safest and surest way of ensuring a successful Day care surgery. There is a special requirement for the surgeon to ‘learn’ different block, which they will be required to use on a daily basis. Every speciality has specific local anaesthetic blocks which can be used for the safe and successful completion of the surgical procedure. For example, Ophthalmology, the pioneers in Local blocks, have mastered the art of giving retro-bulbar block, which takes care of most of their surgical procedures.

Anaphylactic reaction to local anaesthesia sometimes makes surgeons want to try a test dose pre-operatively, but, it necessitates a test dose to be administered in the ward, which also, can give rise to a reaction in sensitive patients. The best place to give a test dose is in the OT, where all the emergency precautions and measures are in place.

Adequate sedation, pre-op., Can take care of anxieties of the patient as well as the surgeon!

Post operative nausea and vomiting is much less in local anaesthesia. Post operative pain can be reduced to a large extent with longer acting anaesthetics like bupivacain mixed or infiltrated at the end of surgery.

Failure of blocks are sometimes encountered due to several reasons, even in the experts hand, there are times when the block does not hit the required spot, or the bulk of an obese patient sometimes causes a loss of anaesthetic agent in the sub-cute fat. The concerned surgeons may use inadequate amount of the anaesthetic agent, due to fear of over use of the local solution. An over anxious patient may require more time for the anaesthesia to act or additional sedation. Adjusting the dose as according to the weight of the patient will, to some extent, reduce this concern. Preparation of the patient and your self for a short GA, in all probability will take care of this uncommon happening.

In summary
While deciding on the type of anaesthesia, nature & type of surgery, comfort level of the patient and surgeon, is taken into consideration. In a properly prepared and convinced patient, surgeries under local anaesthesia, have a wide safety and success, in a Day care set up.

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