



One Day Surgery Times

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Board:

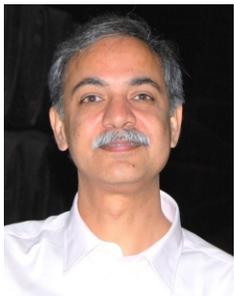
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* **36th ACRSI Conference** is being held in Khajuraho, M.P.,
20th-22nd Sept. 2013. For details, log on to: www.acrsicon2013.in

* **11th IAAS Congress** will be held in Barcelona, Spain, from 8th to 11h May, 2015.

**From the Editors Desk:****General Surgery under Local anaesthesia:**

The types of surgeries that can be performed under local anaesthesia in General Surgery per say, has increased in numbers over a period of time. More so, with the experience of the surgical team and patients

acceptance, it has become a common event in a Specialised surgical center.

At One Day Surgery Center, since the beginning, that is since 2007, we have performed several thousand procedures under local anaesthesia. With a combination of sedation, several major procedures have been performed with success.

As we all know, smaller lumps and bumps, are performed purely under local anaesthesia, But, some exceptional cases, for example in pediatric age group, sedation become mandatory. Also, in adults, anxiety of surgical pain, often makes a patient demand sedation or even general anaesthesia. Then, your expertise in convincing the patient comes into play. Sometimes, I have even had my anaesthetist stand by in the theater, as a security and as an anxiolytic for the patient, only the presence, no sedation. Though it adds to the cost, it is worth it.

Sedation comes in different forms, the use of drugs like 'Fortwin and Phenergan' as pre-medication, is well known and was widely used. With the advent of shorter acting drugs like Phentanyl and Medazolam, including Propofol, can be titrated and repeated as often as required. Ketamin, in small doses, especially in children, is a wonderful drug to give in any surgery, if not contraindicated. In adults too, smaller doses in combination of a good sedative, works very well. But, in highly selected cases. That too by experts only.

Now, local anaesthesia can be fine tuned to a speciality in itself. Most surgeon give their own local anaesthesia and develop a perfect skill in repeatedly doing so. Since the time of my residency as a house man, I have been taught by one of the senior most anaesthesiologist in giving the right local anaesthesia, almost 25 years ago, and since then I have not found any reason to change. Depth of sedation varies from patient to patient, depending on the nature of surgery and nature of the patient.

History:

The first use of Lignocaine was published as recently as 1944, but infiltrative anaesthesia has been in use since 1892, first reported by C. I. Shleich. The use of cocaine leaves to create a decoction, was known in the ancient time, thus, refinement was an ongoing process.

Anaesthesia Blocks:

Most commonly used blocks in everyday General surgery are:

- 1) Inguinal block, for Inguinal hernia surgery.
- 2) Pudendal Block, for anal surgeries like Piles, Fissures and Fistulas.
- 3) Ring blocks for surgeries on fingers and toes, as well as Penile Block for circumcisions and Meatotomy.
- 4) Blocks for Umbilical and epigastric hernias.
- 5) Field block for Pilonidal sinus surgery, gynaecomastia excision, abscess drainage.
- 6) Field blocks are also used for excision of lumps like Sebaceous cyst, lipoma, neurofibroma, corns, Lymph node, breast lump, etc.
- 7) Cord block for Hydrocele, Vasectomy and Testicular biopsy.

Material & Method:

Usually, we always use a combination of two local anaesthetic drugs, one is short acting but almost immediate in onset, that is, Lignocaine HCl. The other is Bupivacaine, which is long acting but slower in onset.

Lignocaine is available as 1% plain & 2% with or without adrenaline for local use. We prefer to use with adrenaline, as a combination, as it has the advantage of faster action and allows more quantity of Lignocaine to be used, with the added advantage of creating a bloodless field during surgery. Cases where there is contraindication for the use of adrenaline, such as existing cardiac disease, we should use plain Lignocaine. There is a method of dose calculation for these drugs, for example, with adrenaline, Lignocaine can be used up to 7 mg per kg body weight, where as, without adrenaline, it comes down to 4 mg per kg. Therefore, in a patient of 70 kg weight, technically, 980 mg of 2% lignocaine with adrenaline and 560 mg of lignocaine of 1% without adrenaline, can be used safely. Therefore, 10 ml of 2% lignocaine with adrenaline would be about 200 mg of lignocaine. Well within the requirement.

Similarly, 0.25% or 0.50% of bupivacaine is available and it can be used independently or in combination with Lignocaine.

There are several publications for and against these combinations and their advantages or disadvantages. But, practically, we have always been using a combination of 50% each, that is, 20 ml of 2% Lignocain Hcl with 20 ml of 0.50% Bupivacaine. We use the finest available needle, that is, 27G, 1 & half inch long, which is less painful, and the solution is injected through it.

Our experience has been that, the onset of action is within 7 to 10 min., and lasts for several hours.

We have found several other advantages, which are many folds. Some significant points are:

- 1) The side effects of General anaesthesia or spinal anaesthesia are totally avoided.
- 2) Patient is immediately ambulatory, as soon as effects of sedation wears off, that is within 2 hours.
- 3) Early oral intake. Post Operative Nausea & Vomiting is minimised.
- 4) Early discharge.
- 5) More cost effective.

There are some disadvantages and contraindications, such as, in children, local and sedation is difficult, uncooperative patients, prolonged surgeries, etc. Also, in cases of larger abscesses, where it is better to give short GA.

All in all, local as a adjuvant to short GA, has definite benefits than pure GA, in the sense that it helps in reducing the dosage requirement of GA. Though it may mean an increase in the overall cost, marginally, it is much safer.

The world literature is full of articles for and against these combinations and several incidences are mentioned on the reactions to local and toxicity on exceeding the dose. The simplest way is to calculate the dosage required and to ask history of previous surgeries under local anaesthesia, especially dental procedures, which most of our patients have undergone sometime or other. Or when in doubt, do a sensitivity test. Though, is rarest or rare cases, even sensitivity test have turned fatal. These eventualities are best managed in the OT itself.

Another safety feature that we have is to keep our anaesthetist standby, in the OT for most procedures, in case of emergencies

which can be easily managed.

Another concern is an anxious patient, some patients do not like the idea of local anaesthesia, for them a good sedation is sufficient to reduce the anxiety significantly. On the other hand, we have been able to convince several patients to under go surgeries because it is under local anaesthesia and does not require GA or Spinal, therefore they need not be hospitalised!

Some surgeons are not very comfortable operating under local anaesthesia. It takes getting used to handling of instruments and tissues under local, as well as being aware that the patient is in some stage of consciousness, he can move and also, he can talk during surgery. This takes a little getting used to.

Among other concerns of local anaesthesia is its effectiveness in areas of infection, for example, operating on a carbuncle. There is a risk of spreading of infection while injecting in the area and also, the reduced effectiveness of local in the presence of infection. Practical solution is to keep to near normal area for infiltration of local.



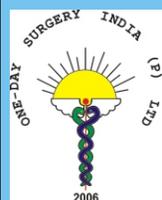
There are suggestions to use Sodabarbonate to the local anaesthesia solution to make it alkaline and effective.

But, all in all, the philosophy works that, if not 100%, then at least 80% of local anaesthesia will work, the rest can be managed by vocal anaesthesia!



- Dr. T. Naresh Row

(To be continued...)



Surgery & discharge on same day for:
Hernia, Piles, Fistula, Fissure, Diabetic foot,
Pilonidal sinus, Ingrown toe nail,
Lipoma, Sebaceous cyst, Abscess,
Circumcision, Vasectomy, D & C, Tubal
Ligation, Diagnostic Lap; etc. (In selected cases)
Extended stay: Appendix, Gall stones, Hystrectomy, etc.



Other Surgeries related to: Paediatric, Urology, Plastic, ENT, Vascular. Chemotherapy & related treatment. (Please take prior appointment).

One Day Surgery Center

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Patient's convenience and safety is our prime concern.

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