

PROTOCOL FOR IV LIDOCAINE

The protocol for intravenous lidocaine is very simple. Intravenous lidocaine is a very reliable pain reliever if given in doses between 200 and 400mg. Our clinic uses 2% lidocaine solution without preservative. That concentration gives 20mg Lidocaine per ml. of solution.

Inject the appropriate dose into 100ml of either 5% Dextrose and water or saline. Because intravenous lidocaine can raise blood pressure, dextrose and water is probably a better solution to use than normal saline. Each patient is started with 200mg because the most effective dose is often not weight related. Most people can tolerate 200mg quite easily. The 100ml of intravenous fluid containing lidocaine is infused over a period of 30 to 60 minutes through a 22 gauge inter-cath after which the inter-cath is removed and the patient is allowed to leave the clinic.

The patient should not drive a car for at least fifteen minutes after an infusion and on the first visit or two should have someone accompany them. We do all our infusions with the patients in the sitting position rather than lying on a stretcher. Many patients get quite thirsty during the infusion so drinking water should be made available to them. If the patient does not respond to the initial 200mg they are brought back a week later and given a second infusion with an increase to between 240mg and 280mg depending on their weight. If that is not effective they are brought back a week later and given a dose of between 280mg and 340mg. If they do not have any effect after the third infusion then the trial of lidocaine is discontinued. Generally speaking, 85% of patients will have a positive response within the first three treatments.

Once a positive response has been achieved, the weekly doses are increased by 20mg each time. Usually at a certain point the patient will have a worse response with one of the increases. This means they have passed the optimum dose of lidocaine and will get less pain reduction than they will get from a lower amount of lidocaine. If a patient does well with 240mg and it is increased to 260mg. and they get less pain relief with that infusion, the dose should be reduced to 240mg again. This will usually produce better pain relief. The amount of pain relief from lidocaine is not proportional to the dose of lidocaine. It is a bell curve. The best pain relief will be achieved at the optimal dose. If the amount of lidocaine is increased beyond the optimal dose, there will be more side effects and less pain relief than there would be if there were no increase.