

#### Introduction

This leaflet aims to provide you with the basic information about the Intravenous Sedation / Monitored Anaesthetic Care ( MAC ) that you are going to receive. If you have any questions not covered in this leaflet, please discuss with your doctor / anesthesiologist who will be willing to answer your questions.

#### What is intravenous sedation?

Intravenous sedation is a technique that uses sedative drugs delivered through blood stream to induce different levels of sedation ranging from calm, responsive to voice only, responsive to tactile stimulation, responsive to painful stimulation and unresponsive to painful stimulation. You can breathe on your own during sedation.

## Who is responsible for your sedation?

Your doctor who performs the procedure will give you the appropriate amount of sedative drugs to achieve the level of sedation necessary for the procedure. Your doctor will stay with you and ensure your safety during the whole procedure.

# What will I expect during the procedure?

Your doctor or nurse will insert a plastic catheter into your vein and your doctor will inject sedative drugs through it. Your vital signs (blood pressure; pulse and blood oxygen saturation etc) are monitored continuously and your safety and comfort are ensured. Since there is fluctuation in sedation level, you may be aware of the procedure at some stage but usually not recallable at the end of the procedure.

#### Is there any risk in intravenous sedation?

In general, the risk directly associated with intravenous sedation is very small. Common side effects include respiratory depression and short term confusion. Uncommon side effects and complications include airway obstruction, apnoea, hypotension, aspiration of stomach contents / other matter into the lungs and awareness.

# What will happen if I cannot fall asleep after given sedative drugs?

Many factors contribute to the success of intravenous sedation which include patient's pre-existing medical conditions, current medication and type of procedure to be undertaken. Your doctor may add some more sedative drugs in case the sedation is inadequate or anaesthesiologist may be called in and convert your sedation to Monitored Anaesthetic Care ( MAC ).

## What is Monitored Anaesthesia Care ( MAC )?

Monitored Anaesthetic Care (MAC) is a carefully monitored drug-induced, reversible sedative technique. MAC anaesthesia is different from general anaesthesia as the dosage of drugs is low enough that you remain responsive and breathe without assistance. MAC keeps you very drowsy during the procedure but due to the short acting nature of the anaesthetic drugs, you are usually awake promptly at the end of the procedure.

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# Who is responsible for MAC?

MAC is provided by your anaesthesiologist who stays with you and ensures your safety during the whole procedure.

# Is there any difference between intravenous sedation and MAC?

The main difference is that MAC sedation can control and maintain your level of sedation at a more steady stage and the risk of failed sedation is far less than intravenous sedation. After the procedure, the MAC patients usually regain consciousness sooner and are less drowsy.

# Which type of sedation carries higher risk? Monitored Anaesthetic Care ( MAC ) or intravenous sedation?

In general, intravenous sedation and MAC are both very safe and carry low risks. The side effects are also very similar between these two techniques. However, in MAC sedation, the level of sedation is more easily titrated and the chance of failed sedation is comparably lower. As MAC sedation is carried out by anaesthesiologist, it is much safer in high risk patients. In general, patient's satisfaction level is higher in MAC sedation than intravenous sedation.

# Am I required to stop eating or drinking before procedure under intravenous sedation or MAC?

Even though you are not going to have general anesthesia, in order to prevent aspiration of food or liquid into your lungs, you should not eat for at least 6 hours before your operation. You can safely drink small amount of water up to 2 hours before anaesthesia. If you have an emergency operation, special anaesthetic technique will be used to reduce the risk of aspiration. Your doctor and nurses will give you clear instructions about fasting and you should follow them strictly. Aspiration is still a potential risk in intravenous sedation and MAC.

#### What should I NOT do for the first 24 hours after intravenous sedation or MAC?

- Do not drive or use heavy equipment
- Do not make important decisions or sign documents
- Avoid alcohol
- Have someone to stay with you, if possible to watch out for problems and keep you safe

# **Disclaimer**

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

#### Reference

- 1. Frank, R. L., Wolfson, A. B. & Grayzel, J. (2020). Procedural sedation in adults outside the operating room. Retrieved on 27/6/2020 from https://www.uptodate.com/contents/procedural-sedation-in-adults-outside-the- operating-room
- 2. Rosero, E. B., Joshi, G. P. & Crowley, M. (2020). Monitored anesthesia care in adults. Retrieved 27/6/2020 from https://www.uptodate.com/contents/monitored-anesthesia-care-in-adults

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