

## Monitored Anesthesia Care (MAC)

### What distinguishes MAC from general anesthesia?

Usually reserved for major surgical procedures, general anesthesia is a deep state of sleep where the patient loses consciousness and sensation. This usually requires insertion of a breathing tube and assisted ventilation. Like general anesthesia, MAC anesthesia uses sedatives and other agents, but the dosage is low enough that patients remain responsive and breathe without assistance. MAC is often used during minor surgery and simple procedures.

The purpose of a MAC is to provide the patient with anxiety relief, amnesia, pain relief, comfort, and safety during the procedure. During MAC, the patient is sedated, but always remains responsive when stimulated to do so. The patient breathes on his own and does not require insertion of a breathing tube as in general anesthesia. The patient is usually awake at the end of the procedure and can readily be discharged from the recovery room. When undergoing a procedure with MAC, the patient is evaluated and monitored in the same manner as if he is having any other form of anesthesia.

### Getting ready

Prior to the procedure, the Anesthesia provider will interview the patient about his general health and review information provided by the physician and the patient. Pertinent information will include the patient's current medical history, medications, allergies, and past medical, surgical and anesthetic history.

### What to expect during the procedure

On the day of the procedure, an intravenous line (IV) will be placed in the patient through which medications can be given. The anesthesia care is provided by the Anesthesiologist, a Certified Registered Nurse Anesthetist (CRNA), or the anesthesia team consisting of both. Once in the operating suite, monitors will be placed on the patient to measure his vital signs which include blood pressure, heart rate and rhythm, oxygenation and respiration. Supplemental oxygen is usually given by nasal cannula. IV sedation is then given and the procedure begins. The CRNA will choose an appropriate dose of medication to maintain a state of "twilight sleep" so that the patient remains comfortable throughout the procedure. To ensure the patient's comfort and safety, the CRNA continuously monitors the patient's vital signs and verbal response throughout the procedure.

### End of procedure and discharge

At the completion of the procedure, the patient should be easily arousable and is taken to the Recovery Room. He spends about 30 minutes or more there and continues to be monitored by the Recovery Room staff for residual anesthetic effects. The patient is discharged when his functioning level has returned to normal. Since the patient has been given sedatives, the patient is advised not to operate any machinery, go to work, make any major decision, sign any legal document, nor drink alcohol for the rest of that day. In addition, he should have someone to assist him in getting home and watch for any lasting sedative effects or unexpected problem. Clear follow-up instructions and appropriate contact phone numbers are also given at this time.

### Conclusion

MAC anesthesia provides safe sedation for patients undergoing simple procedures and minor surgeries. Like any other form of anesthesia, the patient should be just as carefully evaluated and monitored before, during and after the procedure to ensure his safety and comfort. The patient quickly recovers from MAC and this allows for a timely discharge. If the patient should have any questions concerning his care under MAC, he should never hesitate to discuss them with his doctors.