

IDENTIFYING SOURCES OF LEAK IN THE ANESTHESIA MACHINE CIRCUIT

The current practice is to run Fresh Gas Flows (FGF) that are equal to the patient's Minute Ventilation (MV) on the anesthesia machine. Leaks have been encountered in the anesthesia machine circuit while running these high FGFs. Below are suggestions to ensure leaks are not occurring in the system:

1. Routinely check for a circuit leak.
 - a. With higher FGF, there is often a circuit leak identified on the anesthesia machine. Verify this by pressing the "Next Page" button.
2. Ensure that the in-line suction device is not entraining air.
 - a. Collaborate with the nursing staff about being vigilant in pulling back the in-line suction catheter to the solid blue line.
 - b. There should be two caps on the in-line suction.
 - c. Check that all caps are tight on in-line suction: proximally where saline bullet irrigation attaches as well as the distal end where wall suction line attaches.
3. ALL STAFF entering the room needs a N95 mask as there are subtle leaks happening proximal to the viral filter.
4. Tighten all circuit connections from the patient to the anesthesia machine.
5. Check cuff pressures using a manometer when available to rule out other sources of leak.

Created by MGH COVID-19 Task Force