



تقنيات اجهزة تخدير الكورس الاول

MEDICAL SUCTION DEVICES IN ANESTHESIA

Sawa University

College of health and medical
techniques

Department of Anesthesia

Stage 3

جامعة ساوة

الاهلية

كلية التقنيات الصحية
والطبية

قسم تقنيات التخدير
المرحلة الثالثة

محاضرة رقم 11

الجانب النظري

Lecture No 11

Theoretical

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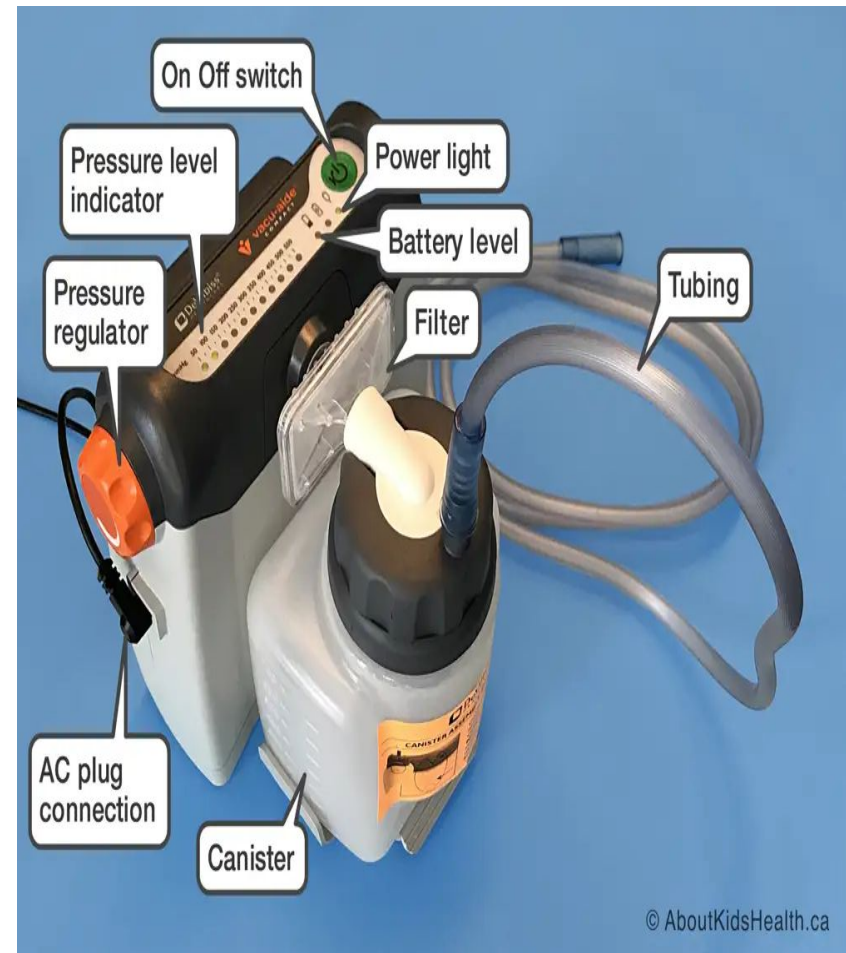
Definition

Medical suction devices:
remove blood, secretions,
vomit, and fluids from the
airway to maintain airway
patency during anesthesia.



Main Components

1. - Suction pump/motor
2. - Collection canister
3. - Connecting tubing
4. - Yankauer tip / suction catheter
5. - Bacterial filter
6. - Vacuum regulator
7. - Power supply



Types of Suction Devices

1. Wall-mounted suction
2. Portable suction unit
3. Battery-operated suction
4. Manual suction device



Choice of Suction Device

- - Type of surgery
- - Patient age and condition
- - Portability requirement
- - Power source availability
- - Required suction strength
- - Infection control needs

Standards of Medical Suction Devices

- - Must meet hospital safety standards
- - Proper vacuum pressure regulation
- - Disposable or sterilizable accessories
- - Electrical safety compliance
- - Infection control guidelines

Normal Suction Pressure Standards

- - Adults: 100–150 mmHg
- - Children: 80–120 mmHg
- - Infants: 60–80 mmHg
- - Neonates: 40–60 mmHg

Testing of Suction Devices

- - Check power source
- - Verify vacuum pressure
- - Inspect tubing for leaks
- - Ensure canister is empty and secured
- - Test suction tip function

Steps of Pre-use Testing

- 1. Turn on suction device
- 2. Occlude tubing end
- 3. Observe pressure gauge
- 4. Confirm adequate suction force
- 5. Release and re-check

Safety Precautions

- - Avoid excessive negative pressure
- - Limit suction time
- - Use sterile catheters
- - Monitor oxygen saturation
- - Prevent cross contamination

Role of Anesthesia Technician

- - Device setup before anesthesia
- - Continuous readiness during surgery
- - Immediate troubleshooting
- - Cleaning and disinfection after use

Complications

- - Hypoxia
- - Mucosal injury
- - Infection
- - Bleeding

Conclusion

- Medical suction devices are essential in anesthesia. Correct selection, standard compliance, and proper testing ensure patient safety and effective airway management.