

Practice Test 18

READING SUB-TEST – PART B

Text 1 – Intravenous Cannulation

Intravenous cannulation involves inserting a catheter into a vein to enable the administration of fluids, medications, or blood products. Modern cannulae are typically made from flexible materials such as polyurethane, which improves patient comfort and reduces trauma to the vessel wall compared to older materials. In addition, many devices include a flashback chamber, allowing clinicians to confirm correct placement within the vein. The design of these devices reflects ongoing efforts to improve both safety and efficiency in clinical practice. However, successful use still depends on practitioner skill and patient factors.

Text 2 – Prevention of Air Embolism

Air embolism is a potentially serious complication that can occur when air enters the bloodstream during vascular procedures. This may result in significant respiratory or cardiovascular compromise, particularly if large volumes of air are involved. Preventative strategies include positioning the patient appropriately and minimising the time during which veins are exposed to air. While such measures can reduce risk, they do not eliminate it entirely. Careful technique and vigilance are therefore essential during all procedures involving venous access.

Text 3 – Intraosseous Access

The intraosseous space contains a network of blood vessels that enables rapid delivery of fluids and medications into the systemic circulation. This route is particularly useful in emergency situations where intravenous access is difficult or delayed. Substances administered via this pathway enter circulation quickly, making it an effective alternative in critical care. Although widely used in emergencies, appropriate training is required to ensure safe and effective insertion. As such, it represents a valuable but specialised clinical technique.

Text 4 – Patient Mobilisation

Patient mobilisation involves gradually increasing physical activity following illness, injury, or prolonged immobility. The process typically begins with simple movements

such as sitting, followed by standing and eventually walking. Monitoring of vital signs, including blood pressure and heart rate, is often recommended to ensure patient safety during progression. This gradual approach helps to prevent complications associated with immobility while supporting recovery. However, the pace of mobilisation should be tailored to individual patient needs.

Text 5 – Semi-Fowler’s Position

The semi-Fowler’s position is commonly used in patients with respiratory or cardiovascular conditions to improve comfort and breathing. In this position, the patient’s head and upper body are elevated at an angle between approximately 30° and 45°. This positioning facilitates lung expansion and reduces the effort required for breathing. It is frequently used in both acute and long-term care settings. The choice of position may vary depending on the patient’s clinical condition.

Text 6 – Use of Thermal Therapy Devices

Thermal therapy devices, such as gel pads and hot water bottles, are commonly used to provide heat treatment for patients. After use, appropriate handling is required to maintain hygiene and prevent infection. Disposable covers should be discarded, while reusable covers must be cleaned or placed in designated laundry containers. In addition, the device itself should be disinfected before reuse. These procedures ensure safe and effective use of thermal therapy in clinical settings.