

# Percutaneous tracheostomy

## Percutaneous tracheostomy

As an alternative to open tracheostomy, a percutaneous tracheostomy is commonly performed in the critical care setting in an intubated patient. A transverse skin incision is made at the level of the first and second tracheal rings; blunt dissection of the midline is then performed. A 22-gauge needle is inserted between the second and third tracheal rings. When air is aspirated into the syringe, the guidewire is introduced. Sequentially larger dilators are then inserted over the guidewire to create a suitable-sized tracheostome. Finally, the tracheostomy tube is introduced along the guidewire and dilator. The guidewire and dilator are removed, the cuff of the tracheostomy tube is inflated and the breathing circuit is connected. The endotracheal tube can then be removed. Patients must have appropriate anatomy and no limitation of neck movement. If any doubt arises as to the suitability of a patient for percutaneous tracheostomy, a surgical approach should be adopted. Percutaneous tracheostomy is rarely performed in children.

Figure 52.44 Bjork /f\_I ap. Figure 52.45 Fenestration in a Bjork /f\_I ap.

## Percutaneous tracheostomy

As an alternative to open tracheostomy, a percutaneous tracheostomy is commonly performed in the critical care setting in an intubated patient. A transverse skin incision is made at the level of the first and second tracheal rings; blunt dissection of the midline is then performed. A 22-gauge needle is inserted between the second and third tracheal rings. When air is aspirated into the syringe, the guidewire is introduced. Sequentially larger dilators are then inserted over the guidewire to create a suitable-sized tracheostome. Finally, the tracheostomy tube is introduced along the guidewire and dilator. The guidewire and dilator are removed, the cuff of the tracheostomy tube is inflated and the breathing circuit is connected. The endotracheal tube can then be removed. Patients must have appropriate anatomy and no limitation of neck movement. If any doubt arises as to the suitability of a patient for percutaneous tracheostomy, a surgical approach should be adopted. Percutaneous tracheostomy is rarely performed in children.

Figure 52.44 Bjork /f\_I ap. Figure 52.45 Fenestration in a Bjork /f\_I ap.

---

Revision #1

Created 2025-12-31 15:20:01 UTC by Omar Ayman

Updated 2025-12-31 15:20:01 UTC by Omar Ayman