Insertion of arterial line

Assessment of competences for ANP / ACP / SCP

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Please note: Practitioners can add DOPS, PBAs and CEXs as evidence.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | **NOT competent** | **Competent** | **Signature and date** |
| Insertion of arterial line | | | | |
| 1 | Indications   * To monitor intra-arterial blood pressure in haemodynamically unstable patients * To provide arterial access for the monitoring of arterial blood gases or other blood values (e.g. full blood count, coagulation, electrolytes, urea) where the need for frequent blood sampling exists |  |  |  |
| 2 | Contraindications   * Patient declines consent * Negative modified Allen’s test * Lymphoedema * AV fistula * Skin infection * Soft tissue injury |  |  |  |
| 3 | Equipment   * Sterile dressing pack, drapes, gowns, gloves, face visor * Cannula, lignocaine 1% (if patient awake), syringe, dressing * Transducer set and fluid * Wrist support if available |  |  |  |
| 4 | Describe anatomy   * Three main nerves – median, radial and radial * Arteries – radial into palmar carpal branch, dorsal carpal branch and ulnar into, interosseous artery, palmer carpal branch and dorsal carpal branch. |  |  |  |
| 5 | Insertion   * Consent * Ensure transducer set is prepared * Position wrist * Modified Allen’s test * Clean area * Drape * Local anaesthetic if patient awake * Palpate the artery * Position hand with dorsi flexed to approx. 60% * Administer local anaesthetic * Put gloves on * Check cannula * Hold the cannula at 45 degree angle to the skin, palpate the artery and insert into the skin * Advance the cannula until blood is in the hub, then advance approx. 2 mm further, hold the needle, then advance the cannula over the needle. Turn off switch if available * Remove the needle * Cover with secure dressing * Connect to transducer system and calibrate * Complete labelling and documentation |  |  |  |
| 6 | Complications   * Exsanguination * Thrombosis * Air embolism * Haematoma * Pseudoaneurysm * Arterial spasm * Traumatic injury to the artery * Nerve injury * Skin necrosis * Infection/sepsis |  |  |  |
| 7 | Demonstrate proficiency in arterial blood pressure monitoring to include:   * Recognition of the correct waveform * Describe factors that will affect the waveform measurement * Actions if abnormal readings |  |  |  |
| **Assessor’s comments** – Describes the indication in relation to clinical findings/indication, the A&P, contraindications and complications. Inserts line and connects to circuit according to the above criteria, ensures readings are reviewed and results are acted on. Identifies abnormal readings and correct action that should be taken.  Practitioner should comment on communication with the multidisciplinary team and the documentation according to the practitioner’s professional body and code of conduct.  Assessor signs to say the practitioner is competent in insertion and has demonstrated the knowledge associated with the process: | | | | |
|  | | | | |
| **This practitioner has completed these outcomes to the appropriate standard.**  **Assessor’s name:**  **Signature and date:** | | **Practitioner’s signature:**  **Date:** | | |