

Pre-Oxygenation project

When a patient is anaesthetised a tube is passed into the trachea to enable breathing during anaesthesia. The placement of the tube interferes with breathing so a period of pre-oxygenation is used to increase the oxygen concentration in the patient's blood to a high level prior to intubation. This should tide the patient over the few minutes of intubation where breathing is difficult.

The anaesthetist can use different methods to perform pre-oxygenation. This study compared the methods in terms of the outcome, the end-tidal oxygen concentration (in y , a percentage). The study was carried out on 20 volunteers (in `Volunteer`), each studied on four occasions (the order is given in `Period`). The four methods used are

- 1) mask applied ordinarily, normal breathing
- 2) mask applied ordinarily, vital capacity breathing
- 3) mask applied at residual volume, vital capacity breathing
- 4) mask applied at residual volume, vital capacity breathing with device to prevent re-breathing

The method applied is given in `Rx`.