General anaesthesia

ACI code
92514-xx [1910] General anaesthesia
Includes: gaseous, inhalational or intravenous general anaesthesia

Drugs

Intravenous agents

- Thiopentone (abbreviation Thio, trade name Pentothal)
- Propofol (trade name Diprivan) – may be IV sedation when the intention is to perform sedation
- Ketamine (trade name Ketalar)
- Midazolam (trade name Hypnovel) – usually sedation but may be IV anaesthesia

Other phrases that may indicate intravenous anaesthesia

- TIVA – Total Intravenous Anaesthesia
- TCI – Target Controlled Infusion (of Propofol)
- Diprifusor – Proprietary TCI pump

Inhalational agents

- Isoflurane (abbreviation Iso)
- Desflurane (abbreviation Des)
- Sevoflurane (abbreviation Sevo)
- Nitrous Oxide (abbreviation N₂O)

Classification guidelines for general anaesthesia

General anaesthesia (unconsciousness) must be distinguished from sedation (consciousness retained). All anaesthetic drugs in small doses produce sedation. Where heavy sedation accidentally progresses to anaesthesia, the intention (sedation) should be coded. As a rule, non-anaesthetists administer sedation rather than anaesthesia.

Clues on the anaesthetic record that indicate general anaesthesia (GA) rather than sedation include:

- Intubation e.g. endotracheal tube (ETT), laryngeal mask airway (LMA) or maintenance of anaesthesia with an Oropharyngeal airway (Guedel airway) and anaesthetic face mask.
- The concurrent use of muscle paralysing drugs:
  - Vecuronium (abbreviation Vec, trade name Norcuron)
  - Rocuronium (abbreviation Roc, trade name Esmuron)
  - Atracurium (abbreviation Atrac, trade name Tracrium)
- Cisatracurium (trade name Nimbex)
- Mivacurium (abbreviation Miva, trade name Mivacron)
- Pancuronium (abbreviation Panc, trade name Pavulon)
- Suxamethonium (abbreviation Sux, trade name Scoline)

IV Propofol is administered deliberately to produce GA for short procedures such as ECT or Cardioversion with neither a LMA or ETT inserted. The airway is maintained with a Guedel airway (this may not be clearly documented) and should be coded as a GA.

**Sedation**

**ACHl code**

92515-xx [1910] Sedation

**Drugs**

Sedation commonly involves the administration of the following drug(s):

- Midazolam
- Pethidine
- Fentanyl
- Propofol – when the intention is to retain consciousness

Sedation may be given by an anaesthetist or by another clinician e.g. clinician performing cardiac catheterisation or colonoscopy.

**Classification guidelines for sedation**

Sedation is only coded if:

- administered to perform a procedure, AND
- inhalational, intravenous, or intramuscular route  AND
- there is no documentation of the use of an artificial airway

Where heavy sedation accidentally progresses to anaesthesia the intention (sedation) should still be coded.

Sedation (by any route) administered for other reasons e.g. for agitation or patient comfort is not coded. See also Coding Rule Q2680 Sedation and ventilation (June 2013).
Regional anaesthesia

ACHI codes
92508-xx [1909] Neuraxial block (includes: caudal, epidural, spinal injection/infusion)
92509-xx [1909] Regional block, nerve of head or neck
92510-xx [1909] Regional block, nerve of trunk
92511-xx [1909] Regional block, nerve of upper limb
92512-xx [1909] Regional block, nerve of lower limb
92519-xx [1909] Intravenous regional anaesthesia

Drugs
Opioids include:
- Morphine
- Pethidine
- Fentanyl
- Alfentanil
- Reminfentanil

Local anaesthetics include:
- Lignocaine (trade name Xylocaine)
- Bupivacaine (trade name Marcain)
- Ropivacaine (trade name Naropin)

Neuraxial block
The terms spinal, epidural or caudal are usually documented in the regional technique section of the anaesthetic record. The terms extradural and peridural are synonymous with epidural but are rarely used in Australia. Spinal anaesthesia involves the injection of local anaesthetic and/or opioids into the cerebrospinal fluid (CSF). Such injections are often described as intrathecal (abbreviation IT e.g. IT lignocaine 2% 3mL). It is common practice to combine a local anaesthetic with an opioid for spinal and epidural techniques.
Other common sites of regional blocks

- Femoral
- Fascia iliaca
- Sciatic
- Popliteal
- Saphenous
- Ankle
- Brachial plexus
- Interscalene
- Supraclavicular
- Infraclavicular
- Axillary
- Median
- Ulnar
- Transversus Abdominis Plane (TAP)

(N.B. this list is not exhaustive)

The use of regional anaesthesia has expanded in recent years as ultrasound technology has allowed more accurate placement of local anaesthetic solutions around nerves, making blocks safer and more effective.

Regional blocks are commonly performed in combination with cerebral anaesthesia both in order to reduce the depth of the cerebral anaesthesia required, and to provide good quality pain relief after surgery. In these cases both the cerebral anaesthesia and regional anaesthesia should be coded.

Regional blocks are usually administered by an Anaesthetist and documented on the Anaesthetic record.

Regional blocks administered by a surgeon are usually documented on the Operation Report. An example is TAP block which is commonly performed by surgeons as they can directly visualise the abdominal wall layers during surgery and infiltrate the anaesthetic into the correct plane (S. Rao, personal communication November 20, 2019).
Classification guidelines for regional anaesthesia

- As per *Australian Coding Standards, Introduction, Basic structure and principles of ACHI*, point 7: The procedures in the classification are provider neutral. That is, the same code should be assigned for a specific intervention regardless of which health professional performs the intervention.

- When a regional block is administered at the end of an operative procedure with ongoing continuous infusion (commenced in theatre or recovery) then the regional block should be coded along with the appropriate code from block [1912] *Postprocedural analgesia*, as per point 5 in ACS 0031 *Anaesthesia*.

- If the block is administered at the end of the operative procedure **without** ongoing continuous infusion, the coder should attempt to determine whether the intent of the block is postprocedural analgesia or operative anaesthesia. If the intent is only postprocedural analgesia then the regional block should **not** be coded. See also Coding Rule Q3223 *TAP block performed at the end of surgical procedure* (April 2018).

Postprocedural analgesia

ACHI codes

92516-00 [1912] Management of neuraxial block
92517-00 [1912] Management of regional block, nerve of head or neck
92517-01 [1912] Management of regional block, nerve of trunk
92517-02 [1912] Management of regional block, nerve of upper limb
92517-03 [1912] Management of regional block, nerve of lower limb

Classification guidelines for postprocedural analgesia

As per ACS 0031 *Anaesthesia*, the term ‘postprocedural analgesia’ in ACHI encompasses only those procedures which provide ongoing postprocedural analgesia via continuous infusion AND were initiated in the operating suite (theatre or recovery).

Postprocedural analgesia is only coded if:

- initiated in labour ward or operating suite (theatre or recovery), AND
- **continuing** infusion/bolus injection/top up (not single dose, such as single dose Intrathecal opioid) AND
- neuraxial or regional route (this includes pain buster catheters **only** if inserted as a nerve block alongside a peripheral nerve – see Coding Rule Q3222 *Pain buster infusion devices* (April 2018). Intravenous patient controlled analgesia is not coded.
- If post-procedural analgesia meets criteria for coding, follow ACHI Tabular List instruction *Code first: neuraxial or regional block*. This instruction is also in ACS 0031 *Anaesthesia*, point 5.

Acknowledgment

The WA Clinical Coding Authority would like to thank Dr Peter McLoughlin and Dr Sudhakar Rao from Royal Perth Hospital and the WA Clinical Coding Technical Advisory Group, for their contribution in the development of this document.