





Hypothermia during anaesthesia

Multiple causes

- Small body size
- Vasodilation from premedication and anaesthetic drugs
- Heat loss from skin surface or open body cavities
- Lack of shiver response
- · Inhalation of cold, dry anaesthetic gases

Stages of development of hypothermia during anaesthesia

Pre-med 30 mins

Slow temperature loss

MINUS 0.5-1°C

Heat loss is from the core of the animal, which vasoconstricts

Induction 15 mins

Rapid temperature loss

MINUS 1-3°C

Heat loss is rapid because of redistribution to the cold limbs and feet

Maintenance Over hours

Sustained temperature loss

MINUS 1-2°C

Heat loss is convection by movement of warm air away

Recovery Over hours

Slow temperature rise

PLUS 1-2°C

Temperature begins to return to normal very slowly as the animal starts to shiver

Challenges in Practice

Hypothermia slows recovery from anaesthesia:

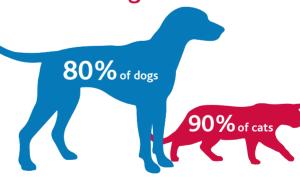
- Doubles recovery time
- Occupies nurse time in monitoring and re-warming cold patients
- Delays discharge, especially for out-patients

Challenges for Patients

Hypothermia increases risk of related problems:

- Slow heart rate and respiratory depression
- · Slow metabolism of drugs, slows recovery
- Pain at surgical site due to shivering in recovery
- Pain as vasoconstriction reduces distribution of analgesic drugs
- Airway obstruction in semi-conscious patients
- Risk of burns with many warming devices

Significant mortality risk in dogs and cats



suffer hypothermia during anaesthesia

Hypothermia: when the body temperature drops by >1°C

1 in 500 animals die under anaesthesia or sedation*

Around 50%

of these deaths occur during recovery, when many patients are hypothermic

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Introducing the Darvall Cozy[™] Warm Air Blanket System

The solution for hypothermia, developed by vets, for vets

Cozy[™] Warm Air Heater

Warms animals safely in kennels and surgery

- · Only 40 minutes to pre-warm
- · Half the time of recovery warming
- · Simple, low-cost routine maintenance and no down-time
- · Heater run time monitored for recording and costing
- · Compact, quiet and easy to use



Cozy[™] Warm Air Blankets

Designed for surgery, dentistry, exotics and kennel use

- Use for pre-warming, anaesthesia and recovery
- Custom sizes for all companion animals
- Thermodynamic design allows rapid heat distribution
- · Antimicrobial-filtered warm air maintains sterile surgical environment
- Thermostatic control ensures patient safety
- · Cost effective for client and clinic



Darvall Heated Breathing Anaesthesia Circuit

Reduce critical heat loss with warm air inhalation

- Darvall Smooth Wall Tubing warms gas before it is breathed
- · Warms from the first breath
- Continuous temperature monitoring of airway and patient's body
- · Automatic temperature feedback controls unit















Setting the standard for patient wellbeing

For reduced anaesthetic complications

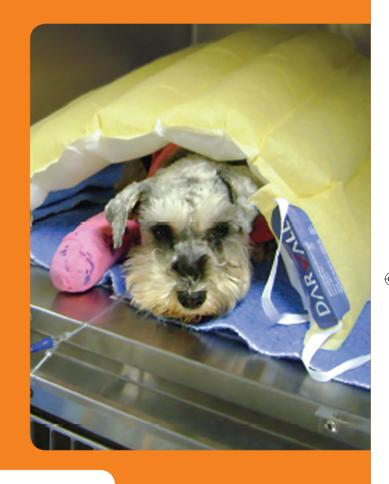
- Cardiac
- Respiratory
- Anaesthesia maintenance

For rapid anaesthesia recovery

- Safe, confident warming
- Fewer post-operative complications in warm patients
- Improved patient outcomes
- Patients go home sooner

Find out more about the Darvall Cozy™ Warm Air Blanket System

For more information contact:















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