

Practical Pharmacology



injection issues

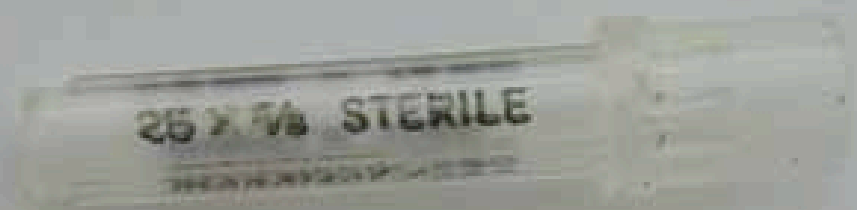
- needles
- bottles
- syringes



needles

- **use correct size**
 - as small as possible
- **maintain sterility**
 - new needle for each injection

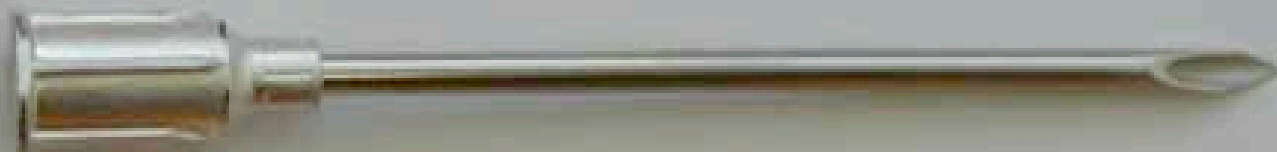




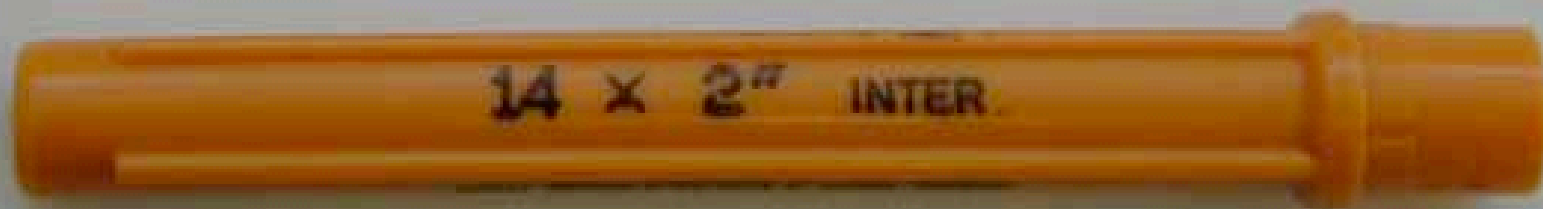
cat



colour coded by gauge



cattle



needles

- **use correct size**
 - as small as possible
- **maintain sterility**
 - new needle for each injection







injection issues

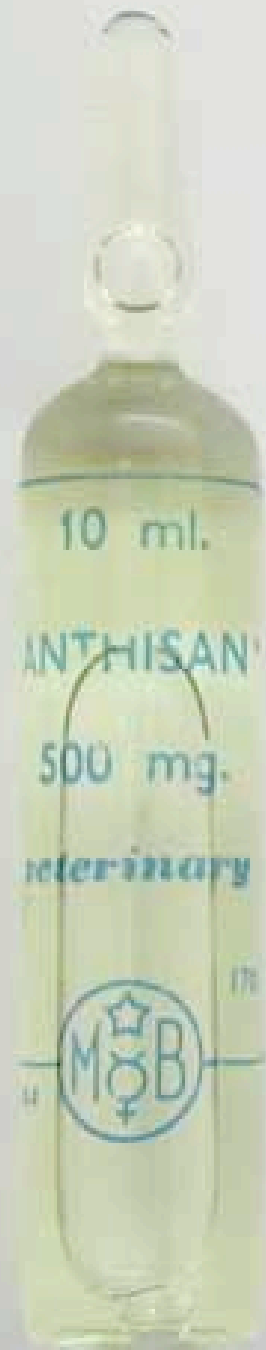
- needles
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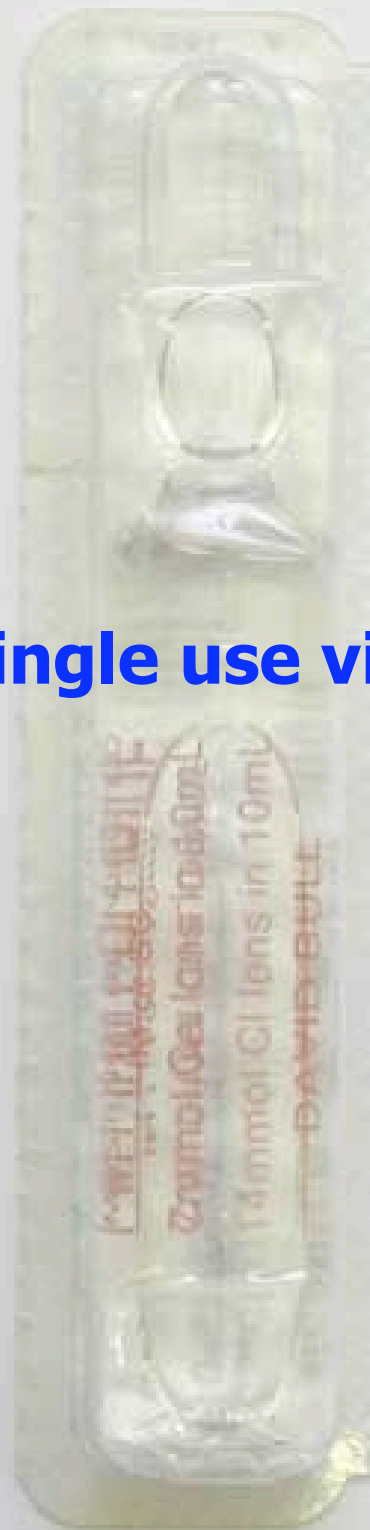
bottles

- single use vials
- multi use bottles
- multi use flexible plastic packs





single use vials





break off away from you

beware sharp edges

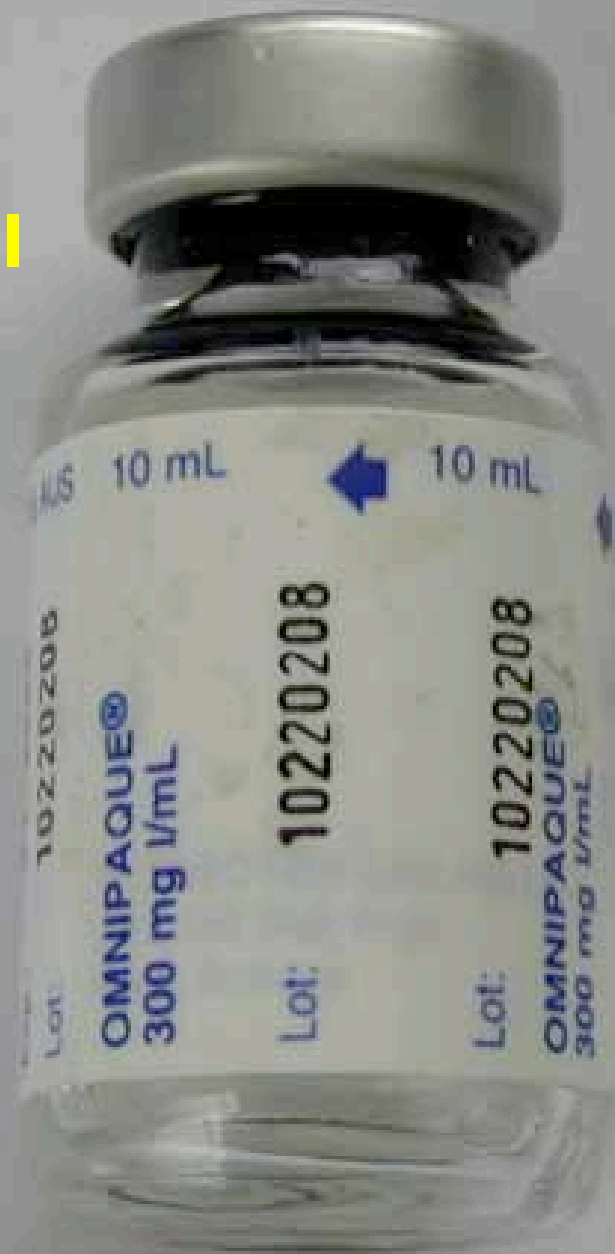




note expiry date

break off top

multiuse vial



maintain sterility

beware sharp edges

remove top







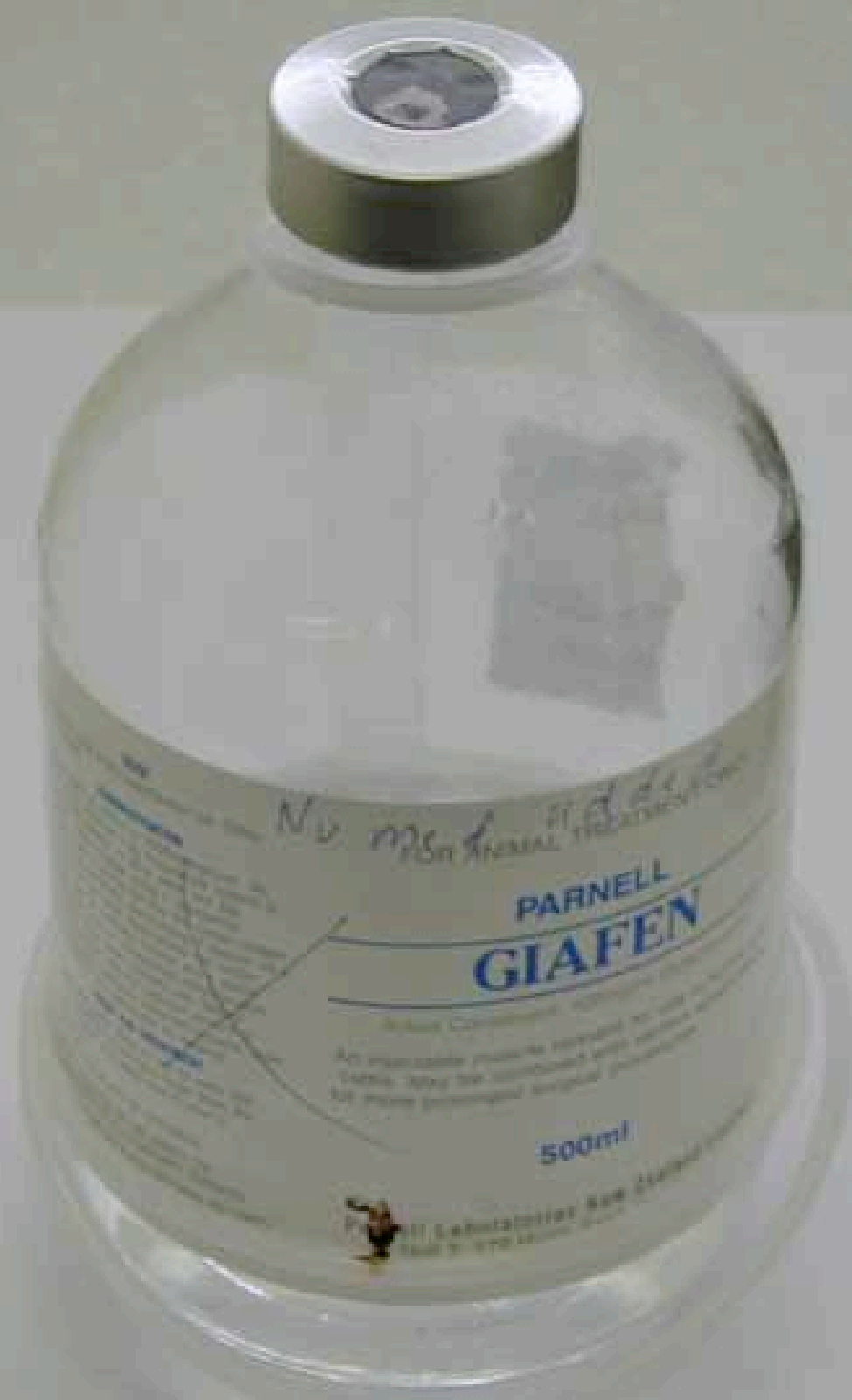
A close-up photograph of a metallic, cylindrical component, likely a flange or a valve. The component has a central circular opening. Inside this opening, there is a dark, irregular, and somewhat crystalline residue. The metal surface is polished and shows some concentric rings. The text "swab here" is overlaid in yellow on the dark residue.

swab here

air injection?

- **air injection**
 - contents under pressure
 - contents can spray out
 - air is not sterile
- **no air injection**
 - difficult to get contents out





No. 128 11/11/11
1000 mg/ml

PARNELL
GLAFEN

500ml



Parnell Laboratories New Zealand
Phone 06 370 4400





air in

liquid out

A clear plastic bottle is shown, partially filled with water. It is held in place by several thin wooden sticks that are wedged against its sides. The bottle is mounted on a larger wooden board. A clear plastic tube is connected to the bottom of the bottle, secured with a black rubber band. The tube extends downwards. The entire setup is on a wooden surface.

flutter valve

avoid using!



air in

BATCH L 69H9

EXP
DATE

SEP 04

flexible plastic containers

suspension

not iv



A314

PRESCRIPTION ONLY
KEEP OUT OF REACH OF CHILDREN

Propofol Injection

Propofol

200 mg in 20 mL

For intravenous use.

Store below 25°C. Do not freeze.

Shake before use.

David Bull Laboratories

1-23 Lexia Place Mulgrave

emulsion

OK iv

diluting injections

- for very small animals
- for aqueous solutions
 - water for injections
 - normal saline
- for non-aqueous solutions
 - must know physical chemistry
 - eg, ivermectin - propylene glycol



anaesthetic bottles

- modern vaporisers have keyed fillers



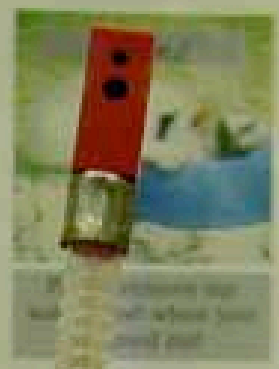


I am here today will be on
with Micky.



110-5045
5/04
1010-5045
3/04
1010-5045
10
104

1010-5045



PRESCRIPTION ONLY MEDICINE
KEEP OUT OF REACH OF CHILDREN
AERRANE
Isoflurane USP
Inhalation Anesthetic
Read the product information before use
AUST R 55105
250 mL
Baxter
Manufactured by
Baxter Healthcare Corporation, Deerfield, Illinois, U.S.A.

PRESCRIPTION ANIMAL REMEDY (P.A.R.)
FOR USE ONLY IN THE PRESENCE
OF A VETERINARIAN
VCS
HALOTHANE 8.2
Active Constituents: Halothane 8.2 (w/v)
250 mL







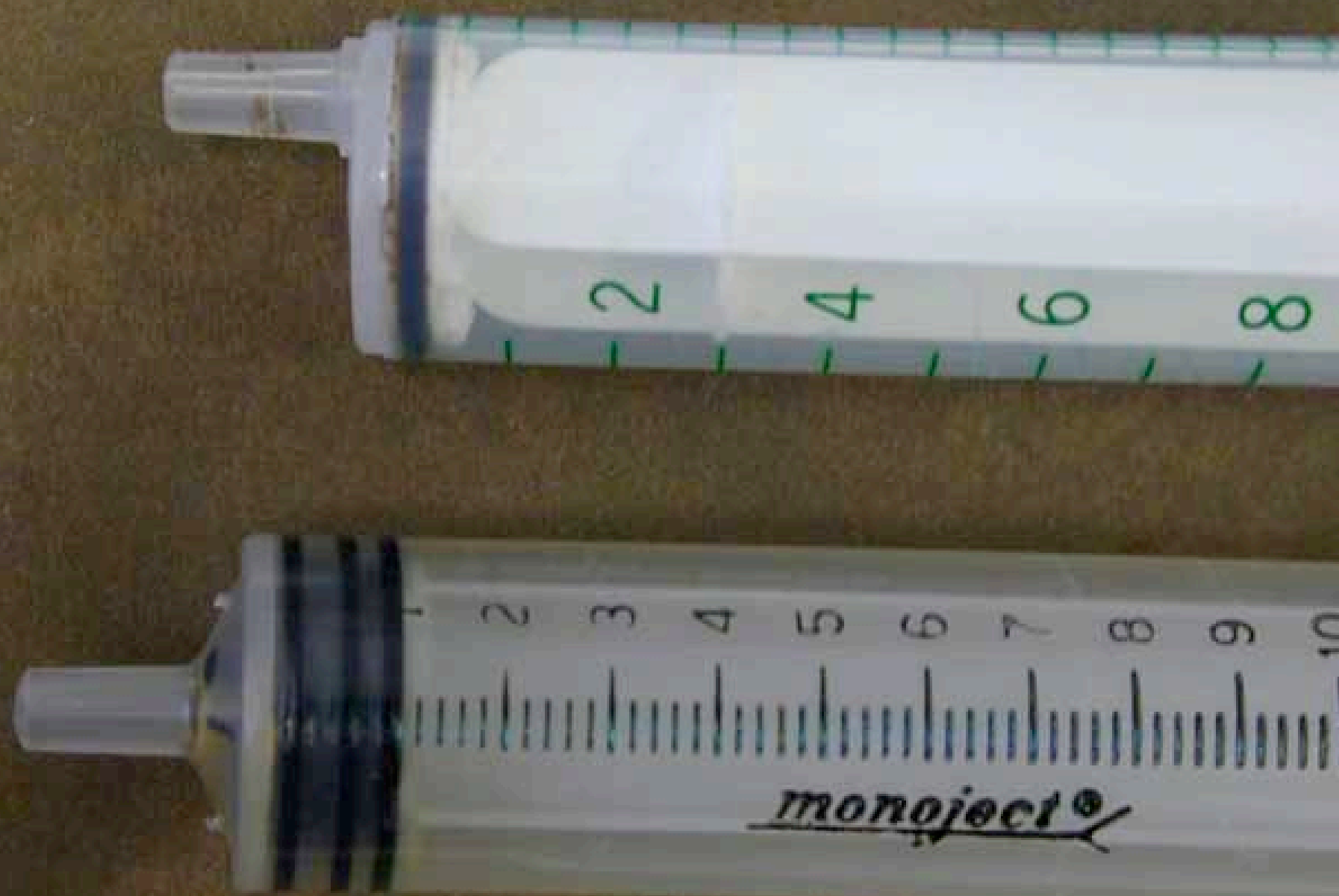


PRESCRIPTION MEDICINE
No. 4450
SEVORANE
SEVOFLURANE
100%
N2O 50%
O2 50%
ABBOTT
Manufactured by
Abbott Laboratories
Abbott Park, Illinois

syringes

- offset nozzle for iv use
- central nozzle for sc or im use
- care with dispensing
 - iv drug abusers





2

4

6

8

2

3

4

5

6

7

8

9

10

monoject®

injection technique

- site?
- swab the injection site?
- use a catheter?



oral drugs

- tablets
- capsules
- liquids



most tablets are coated



cutting exposes active ingredient





use syringes for oral solutions

nozzle which does not accept needle

oral solutions

- for small animals
 - dilute as necessary
 - only as much as necessary



practical pharmacology

- mostly common sense
- use small needles
- keep injections sterile
- use oral drugs where possible

