Perphenazine

SCHEDULING STATUS: S5

CURRENTLY COMPOUNDED FORMULATIONS:

Active ingredient(s)	Injectable	Oral equine paste	Oral carnivore paste	Orals for exotics	Oral solution/suspension	Topical treatment	Shampoo	Capsules/Tablets	Oral powder
Perphenazine hydrochloride	✓								

REGISTERED PRODUCT/ TRADE NAME: No veterinary-labelled products available

PHARMACOLOGICAL CLASSIFICATION: Piperazinyl phenothiazine

PHARMACOLOGICAL ACTION: Long-acting neuroleptics (LANs, depot neuroleptics) are used in humans for their antipsychotic effects, and are particularly useful in treating chronic schizophrenia. The term neuroleptics was coined early on in the pharmacology of tranquillizers and is not used much today; in essence it was used as an alternative to the word tranquillizer. LANs relieve anxiety, reduce hostility, decrease motor activity and moderate excitement.
Animals treated with LANs show indifference to their surroundings, and they show little or no fear of humans, which can make some individual animals dangerous.[1]

The pharmacology of LANs is very similar to that of the phenothiazine derivative tranquillizers.
These drugs take some time to produce their effect, as they are absorbed slowly from the muscle tissue.
Perphenazine will only influence behaviour after 24 hours; it is optimal therefore to use a tranquillizer that can be injected IV and have an effect after 2-3 minutes in combination with it.[1]

INDICATIONS: Transportation of elephants

DOSAGE AND DIRECTIONS FOR USE:

Administration:

- The tendency with LANs is to underdose due to the problems associated with potential side effects and with the long-acting nature of these drugs.[1]
- The drugs must be administered by deep intramuscular injection using a 50 mm (2”) 18 g needle.[1]

The principal applications for LANs are:

- Adapting recently captured animals to boma, corral or pen confinement by reducing anxiety and prevention of aggression and self-inflicted trauma.[1]
- Calming animals prior to and during transport/translocation and reducing stress related to a new environment following translocation.[1]
- Controlling animals that are dominant and aggressive, especially adult males.[1]
- Calming animals for treatment and hospitalization.[1]

Species	Male (mg)	Female (mg)
Blue wildebeest	20	15
Buffalo	50-100	40
Eland	50	30-40
Gemsbok	20-30	20-30
Impala	10	10
Kudu	30-40	20-25
Nyala	15-25	10
Roan antelope	30-40	30
Sable antelope	30	20
Waterbuck	30	20
Zebra	40-70	40-70

General calculation:
Antelope weighing 100-300 kg: 1 mg/10 kg
Antelope weighing <100 kg: 1.4 to 2 mg/10 kg
Mini-antelope: 1 mg/2 kg[2]

WARNINGS/ PRECAUTIONS/ CONTRA-INDICATIONS:

- Sedative and anaesthetic drug dosages for African elephants often very from those of Asian elephants.
- There are several well-documented side effects in humans and animals, which include extrapyramidal signs such as: allotriophagia (chewing, eating), torticollis, anorexia, shivering, tremors, headswaying, pawing the ground, star-gazing and catatonia.[1]
- In animals, over-dosage must be avoided due to sedative and extrapyramidal effects, which may be detrimental to feeding behaviour and defensive reactions.[1]
- Extrapyramidal effects may be controlled with single or repeated does of 10-20 mg biperiden or diazepam.[1]

REFERENCES:

1. Chemical and Physical Restraint of Wild Animals, Second Edition, Edited by Michael D. Kock, and Richard Burroughs
2. Wildlife Group members