

# Prescription Drugs

## **POM-V - Prescription only medicine - Veterinarian**

POM-V is a category of medicine which must be prescribed by a veterinarian to an animal under his care following clinical assessment, and which may be supplied by a veterinarian or pharmacist in accordance with the prescription. Only the product(s) specified in the prescription can be supplied and not an alternative.

The supplier must advise on safe administration, give advice on warnings or contra-indications on the label or package leaflet, and must be satisfied that the person who will use the product is competent to use it safely and intends to use it for a use for which it is authorised.

To comply with the regulations stated above pet prescriptions require a certain amount of information about the animal for which the medicine is intended primarily to ensure it is used safely and appropriately.

A medicine is classified as a POM-V when:

- It requires a strict limitation on its use for specific safety reasons
- It requires the specialised knowledge of a veterinary surgeon for its use/application
- It has a narrow safety margin requiring above average care in its use
- It is government policy to demand professional control at a high level (for example, antimicrobials and Controlled Drugs).

## **Prescription notice**

Prescriptions are available from this practice. You may obtain relevant veterinary medicinal products from us OR ask for a prescription and obtain these medicines from another veterinary surgeon or pharmacy. Your veterinary surgeon may prescribe relevant veterinary medicinal products only following a clinical assessment of an animal under his/her care. A prescription may not be appropriate if your animal is an in-patient or if immediate treatment is necessary.

You will be informed on request of the price of any medicine that may be prescribed for your animal. The general policy of this practice is to re-assess an animal requiring repeat prescriptions for supplies of relevant veterinary medicinal products every 3-6 months, but this may vary with individual circumstances. The standard charge for re-examination is £25. The standard charge for issuing a written prescription to be filled elsewhere is £14 for the first item and £8 each for any subsequent item.

Further information on the price of medicines is available on request. Please give us 24 hours notice when requesting repeat medicines.

Whenever an animal goes on a medication long term, periodic blood testing is necessary. Just as your GP would monitor your response to any long term medication and indeed would keep a check on you to make sure any medication is being dispensed correctly and at the right dose; we need to do the same for your pet. Sometimes we need to make dose adjustment which is why at the beginning of treatment when we have just diagnosed your pet with a treatable disease for example diabetes, more monitoring may be necessary. Once we are happy with response to the treatment given we can check your pet less often but annual testing of many drugs is necessary. Some drugs require more testing.

## **Flea and worm treatments**

Flea and worming treatments that are POM-V can be dispensed providing that we have seen your pet in the last 12 months. If your pet has not been seen within the last 12 months we offer a free flea and worm check-up which can be carried out by one of our qualified registered veterinary nurses.

## **Hormonal treatments**

### **Caninsulin**

Caninsulin is used to treat Diabetes. Once the maintenance dose has been reached and the animal is stabilised, a long term management program needs to be established. The aim should be to manage the animal in such a way as to minimise the variations in its insulin requirement. This includes clinical monitoring to detect under or over dosage of insulin and adjustment of the dose if required. Careful stabilisation and monitoring will help to limit the chronic problems associated with diabetes, including cataracts (dogs), fatty liver (dogs and cats) for example.

Follow up examinations should be performed every 2-4 months (or more often if there are problems) to monitor the animal's health, look at the owners records and check biochemical parameters (like blood glucose and/or fructosamine concentration) are needed. Adjustments to the insulin dose should be made based on interpretation of the clinical signs supported by the laboratory results.

### **Vidalta**

Vidalta (Carbimazole) is used to treat Hyperthyroidism in cats. After starting your cat on Vidalta we normally request a repeat blood test 3-4 weeks afterwards. This is to check that your cat is responding as expected to the medication. Once we have the blood test results back from the laboratory we can decide whether your cat needs a dose adjustment. We make this judgement also using the history you have provided us with and how your cat seems to be on clinical examination.

We should see your cat for follow-up visits every 3 to 6 months. At the 3 month check-up we will weigh your cat to make sure he or she is maintaining their body condition. If they are losing weight we may take a blood test then. If all seems well at that time we will take a blood test every 6 months.

### **Soloxine**

Soloxine (Levothyroxine) is used to treat Hypothyroidism in dogs. This is identical to the naturally occurring hormone. Most dogs respond well to once daily treatment and since this is more economic, this is the suggested approach in cases initially. Tablets should be given in the mornings in order to assist therapeutic monitoring.

The response to adequate treatment in a correctly diagnosed hypothyroid dog should be dramatic. Anything other than this should prompt immediate consideration of either sub-optimal therapy or a misdiagnosis. Speed of clinical improvement depends on the system involved: mental demeanour usually improves within 3-10 days. Hair coat regrowth typically takes 10-12 weeks to be obviously improved. Sometimes we see a worsening of hair loss that commonly occurs between weeks two and six of treatment but is not a cause for concern. Weight loss is clearly progressive but a reasonable expectation is 10% body weight reduction over 3 months.

Monitoring is routinely recommended. Circulating Total T4 should be measured 7-10 days after starting therapy or after changing the dose.

Monitoring samples must be collected 4-6 hours post pill to allow reliable interpretation and we would normally need to see your dog every 6 months. Peak values of approximately 60nmol/L are considered IDEAL (note this is above the “normal” reference range). Peak circulating total T4 values less than 35nmol/L suggest that the dose is too low. Values greater than 100nmol/L probably warrant a dose REDUCTION.

Concurrent circulating cTSH estimation is also recommended to assist in long term monitoring. In well treated dogs, cTSH usually returns to the lower end of the reference range. However, the expected “suppression” of cTSH does not in itself confirm the adequacy of therapy. Values that remain in the “hypothyroid” range certainly indicate inadequate treatment.

Routine biochemical and haematological improvements are expected in well treated hypothyroid dogs.

These improvements are progressive and should occur broadly in line with the clinical changes.

### **Vetoryl**

If we have diagnosed your dog with Hyperadrenocorticism (Cushings disease) there is some necessary monitoring early on in the treatment. Cats can also get Cushings disease but it is rare!

Blood samples should be taken for biochemistry (including electrolytes) and an ACTH stimulation test pre-treatment and then at 10 days, 4 weeks, 12 weeks, and thereafter every 3 months, following initial diagnosis and after each dose adjustment. It is imperative that ACTH stimulation tests are performed 4-6 hours post-dosing to enable accurate interpretation of results.

Dosing in the morning is preferable as this will allow your veterinary surgeon to perform monitoring tests 4-6 hours following administration of the dose. Regular assessment of the clinical progress of the disease should also be made at each of the above time points.

### **Prednisolone**

#### **What are steroids?**

The adrenal glands produce two forms of corticosteroids:

- Glucocorticoids such as cortisol control carbohydrate, fat and protein metabolism and reduce inflammation through several different mechanisms.
- Mineralocorticoids such as aldosterone control electrolyte and total body water levels, primarily by causing sodium retention in the kidneys.

#### **Why are corticosteroids prescribed?**

Because of their anti-inflammatory properties, corticosteroids are a valuable class of medications. They are commonly used to treat mild inflammatory conditions, or to suppress the inflammation associated with an allergic response. When administered in high doses, they act as immunosuppressant drugs. Most forms of corticosteroids that are prescribed are synthetic, and include prednisone, prednisolone, dexamethasone, triamcinolone, and methylprednisolone. These synthetic forms of corticosteroids are many times more potent than the naturally occurring forms

and typically last much longer. Because of their increased potency and duration of activity, if synthetic corticosteroids are used, the patient must be monitored to minimise the risk of side effects.

For decades, this class of drugs has benefited humans and animals. They are a vital part of the treatment protocol for many life-threatening diseases. Their benefits far outweigh any risks in the majority of cases. When used properly, very few side effects occur.

### **What side effects can corticosteroids cause?**

Corticosteroids may have both short term and long term side effects that cause different problems in your pet. It is easier to discuss these side effects as either short-term or long-term side effects.

### **What are some of the short-term side effects?**

Short-term side effects are those that we expect a pet to experience when initially placed on corticosteroids. These side effects depend both on the type of steroid prescribed and on the dosage administered, and include:

- Increased thirst and urination
- Increased hunger
- Panting (especially dogs)
- General loss of energy
- Development or worsening of infections (especially bacterial skin infections)
- Vomiting or nausea (less common)
- Some pre-diabetic dogs or cats may become diabetic with corticosteroid usage. In many of these cases, the diabetes resolves once the steroid is discontinued.

If any of these side effects occur, they can often be eliminated by lowering the dosage or frequency of administration. In some cases, your veterinarian may prescribe another type of corticosteroid in an attempt to reduce the side effects. The objective is to determine the lowest dose of medication that controls the condition with the least number of side effects.

### **What are some of the more common long-term side effects?**

Some diseases and medical conditions require long-term treatment with corticosteroids, at either an anti-inflammatory dose or an immunosuppressive dose. When corticosteroids will be used for more than three to four months, particularly at immunosuppressive doses, additional side effects become a concern. The most commonly seen long-term side effects include:

Urinary Tract Infections (UTI) in up to 30% of patients. Monitoring for the development of UTI is achieved by performing periodic urine cultures. A patient receiving steroids will not experience the usual symptoms of urinary tract infection because the steroid will suppress the inflammation and discomfort commonly associated with a UTI. In many cases, a urine culture may be the only way to detect the infection.

- Development of thin skin, blackheads, and a poor or thin hair coat
- Poor wound healing ability
- Development of obesity due to increased hunger
- Muscle weakness secondary to protein catabolism (breakdown)
- Development of hard plaques or spots on the skin called calcinosis cutis. These plaques are the result of calcium deposition in the skin.
- Increased susceptibility to opportunistic or secondary bacterial infections
- Increased susceptibility to fungal infections (especially of the nasal cavity) and

- Development of adult onset demodectic mange.
- Predisposition to diabetes mellitus

### **I've been told that corticosteroids can cause Cushing's disease. Why is this?**

An excessive level of corticosteroids may cause Cushing's disease. When a pet is on long-term, high doses of glucocorticoids, there is an increased risk that it will develop a condition called iatrogenic (medication induced) Cushing's disease. The clinical signs of Cushing's disease include increased thirst and urination, an increase in UTI's and skin and ear infections, a "pot-bellied" appearance, thinning skin and hair loss. In the treatment of some diseases, the risk of iatrogenic Cushing's disease is unavoidable. To minimize this risk, corticosteroid doses are tapered down over time, or several different drugs may be used in combination.

### **How do I reduce the risk of any of these side effects in my dog?**

Fortunately, most dogs can safely use corticosteroids if a few simple guidelines are followed, such as:

Avoid using glucocorticoids on a daily basis except when specifically instructed by your veterinarian. Only life-threatening immune-mediated diseases require long-term daily steroid use. Most corticosteroid protocols require daily use only during the initial treatment phase. If your dog is receiving corticosteroids to reduce itching or for musculoskeletal pain, you should strive to administer them every other day. If you feel your pet requires daily corticosteroid use, inform us, we may recommend an additional or alternative treatment combination.

If your dog requires more than three to four months of corticosteroid usage, the condition should be re-evaluated or other treatment options should be pursued. .

Dogs on long-term corticosteroids should be monitored with quarterly examinations and with urine and blood tests every six months.

Corticosteroids can be life-saving medications and improve the quality of life for many dogs. By working closely with us, you can safely administer these drugs and provide your dog with the high quality of care he needs and deserves.

### **Loxicom and Metacam (Meloxicam) and Previcox (Firocoxib) NSAIDs**

These drugs are non-steroidal anti-inflammatories and are commonly used for conditions that need both pain relief and anti-inflammatory properties, for example, arthritis, injuries and anything that causes your pet to be in pain!

Patients on NSAID therapy require regular monitoring to ensure that a proper balance is maintained between optimising pain relief and minimising adverse side effects.

We would normally ask you to bring a urine sample down to the surgery every six months and a blood test to check your pets liver and kidney parameters. Should these be elevated we may need to change your pets pain relief as continuing with non-steroidal drugs with elevated liver or kidney enzyme values may make these worsen.

We may ask you these questions:

- Is the patient behaving more energetically?
- Have there been any episodes of limping or stiffness in movement?

- Have any side effects to treatment such as a change in appetite or drinking habits been observed?
- Has there been a change in urination or bowel movements?
- Are there any signs of vomiting? Jaundice?

Should your pet show signs of vomiting or diarrhoea when starting treatment please let us know, sometimes this can be a short term side effect and lowering the dose or stopping the drug for a while maybe necessary. Sometimes we will change the form of the drug as some animals respond better to another medication.

With a liquid NSAID such as METACAM, adjusting the dosage in very small increments, which can be slowly decreased over time, helps maintain an optimal balance between efficacy and safety for your pet.

Using steroid and non-steroid medication at the same time is contraindicated!

## **Phenobarbital**

This drug is used to treat Epilepsy. To determine the correct dose of Phenobarbital, it can be very helpful to monitor its level in the blood . We will want to test Phenobarbital levels after approximately two weeks of therapy to be sure that your dog is in a therapeutic range. It takes two weeks for Phenobarbital to reach a steady state after starting or adjusting Phenobarbital.

We check the levels of Phenobarbital to make sure we reduce the likelihood of liver disease. Once a therapeutic level (or control) is achieved, blood serum levels should be retested every 6 months to be sure that the blood concentrations have not drifted out of the intended range. The liver should also be monitored at this time. Of course probably the best test of whether you have hit a correct dose is whether your dog is still having seizures. Having only one seizure a month is considered good control. If the seizures are under control, it may not be necessary to adjust the dose when the dog's blood level is below therapeutic range. But levels higher than therapeutic range can lead to liver damage.

## **Heart medication**

If your pet has heart disease it is vital that we check your pet regularly. There are a number of medications that we use to help the heart work more efficiently. We may need to adjust the dosage of any medications given or importantly add or subtract other medications so that the heart can work at its best.

We can carry out cardiac ultrasounds at the practice and we may well do this for your pet or take radiographs of the chest.

We need to make sure that your pet is checked every 3 months.