PET DOGS HEALTH PROBLEMS

Edited and Composed
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VET Caress

"Dogs are such agreeable friends, they ask no questions, pass no criticisms."

Preface

This monograph is compiled and provided to care the ***Pet Dogs*** and to protect them from various diseases and health problems. Vaccination schedule and Human Medicines that are used in pet dogs' veterinary practice with their doses are also presented in this document. It is hoped that it will provide service to the practicing veterinarians and pet owners. I am well aware that some errors and inaccuracies may have found into the text and hope that the users of the book will bring these to my attention so that to make corrections in the next editions.

Thanks!

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ELSEVIER


Dedicated to Future Generations

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"Personally I have always felt that the best doctor in the world is Veterinarian. He can't ask his patients what is the matter. He's just got to Know."

(Will Rogers)

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KEYWORDS: COMMON DOG DISEASES, CANINE VACCINATION, PET DOGS VETERINARY MEDICINE

Whether your dog is a working companion, champion show animal, hunting partner, or just a best friend, the kindest and most responsible thing you can do for him is to provide proper health care. Knowing about common dog diseases and being aware of appropriate prevention and treatment can better help you provide that care.

A. Common Dog Diseases and Health Problems

❖Many Diseases Can Be Prevented

Some of the most common and serious dog diseases have been made less common through vaccines; however, these diseases continue to threaten a dog that lacks proper immunization. Puppies may be vaccinated as early as 4-6 weeks, depending on each situation and the veterinarian's advice. Through mother's milk, puppies receive disease-fighting antibodies, which last 6-16 weeks. Vaccinations then take over. Yearly boosters should be given throughout your dog's life, including old age when your dog may become more susceptible to some diseases. The following diseases can be prevented through vaccinations.

Distemper. Canine distemper is caused by a highly contagious, airborne virus. It affects the dog's respiratory, gastrointestinal, and nervous systems. Early symptoms are those of a "cold" — runny eyes and nose, fever, cough, and often diarrhea. Later in the course of disease there may be nervous twitching, paralysis, and seizures (convulsions). There is no successful treatment.

Hepatitis (Adenovirus). Canine infectious hepatitis is a viral disease transmitted by urine, feces, or saliva of infected animals. It affects the liver, kidney, and blood vessels. The signs are fever, tissue swelling, and hemorrhage. Treatment may require blood transfusions and intensive care; often it is not successful.

Leptospirosis. Canine leptospirosis is caused by bacteria spread through contact with nasal secretions, urine, or saliva of infected animals. The disease also can infect humans. Lepto infects the kidneys and causes fever, vomiting, diarrhea, and jaundice. Treatment requires antibiotics, intensive care, and intravenous (IV) fluid therapy. Dogs that recover may be left with permanent kidney damage.

Kennel Cough. Canine infectious tracheobronchitis is caused by several viruses (including *parainfluenza*) and bacteria (including *bordetella*). This highly contagious disease attacks the respiratory system, causing a chronic, dry, hacking cough. It is generally a mild infection, but it may progress to severe pneumonia in young pups or old dogs. Treatment can be helpful.

Parvo. Canine parvovirus is a deadly contagious viral disease that is spread by contact with infected fecal material. The virus is difficult to kill and is easily spread. It attacks the gastrointestinal system, causing fever, lethargy, vomiting, bloody diarrhea, and rapid dehydration. Treatment requires intensive IV fluid and supportive therapy and has a variable rate of success.

Corona virus infection. Canine coronavirus is a highly contagious viral infection attacking the gastrointestinal tract. Signs are similar to parvovirus infection, except it is generally milder and more effectively treated.

Rabies. Rabies is a viral infection of all mammals, including man. It is transmitted by the bite of an infected animal. The virus infects the central nervous system, causing a brain infection (encephalitis), which is always fatal. There is no treatment for dog or man after symptoms appear.

However, a vaccine is effective in preventing the disease in people if it is administered soon after their possible exposure. Because of the serious public health threat, Indiana law requires a rabies vaccination for all dogs.

Internal Parasites

The most common internal intestinal parasites are tapeworms and roundworms.

Tapeworms. Tapeworms are long, segmented worms. They are transmitted when a dog ingests a larval stage of the worm found in a flea or the raw meat of small mammals. A dog that hunts on its own or has had fleas will likely develop tapeworms. Individual tapeworm segments are easily seen in freshly passed feces or around the anus of an infected dog. Special dewormers are required for treatment.

Roundworms. The roundworm classification encompasses many worm types, including ascarids, hookworms, whipworms, and heartworms. The intestinal worms are transmitted by the ingestion of feces or feces-contaminated soil that contains worm eggs. The transmission of the heartworm, however, requires an intermediate host such as a mosquito for propagation. Your veterinarian will perform a specialized microscopic examination of feces (for intestinal worms) or blood (for heartworms) to determine the presence of roundworms. Treatment or prevention with medication is effective, but it should be repeated regularly and monitored to determine if reinfection has occurred. Deworm a dog with a veterinarian's supervision.

The following describes in more detail the four types of roundworms mentioned above.

Ascarids are long, thin spaghetti-like worms that inhabit the intestine. Some types of these worms can be seen in an infected dog's feces. These worms commonly create a problem in pups, where they cause stunted growth, lethargy, diarrhea, vomiting, and a pot-bellied appearance. In severe cases, ascarids can cause seizures (convulsions).

Hookworms are tiny worms that attach themselves to the intestinal wall and suck blood from the dog. They can be transmitted in utero and via the mother's milk to newborn pups. Consequently, pups may have hookworms at a very early age. Signs of infection include lethargy, stunted growth, anemia, and dark, tarry feces. Hookworms are a life-threatening parasite at any age. Blood transfusions may be necessary in advanced cases.

Whipworms are tiny worms that inhabit and develop in the lower bowel. They often cause chronic watery diarrhea and weight loss. Their life cycle is longer than most intestinal parasites, and proper timing of repeated deworming is important for their control.

Heartworms are devastating internal parasites that live in a dog's heart and in the big vessels near the heart, where they cause severe damage to the circulatory system and lungs. They are transmitted by the bite of a mosquito that has bitten an infected dog. Treatment is difficult, but preventive measures are available. Dogs should have a blood test for heartworms in early spring before mosquito season begins. If the test is positive, treatment may be attempted. If the test is negative, preventive medication can be given to your dog daily or on a monthly basis throughout the mosquito season. Consult with your veterinarian to determine the best heartworm prevention plan for your dog.

External Parasites

External parasites are "bugs" (insects) that live on the outside of a dog's body. They include fleas, ticks, lice, flies, mosquitoes, mites, and others. They not only cause irritation, but also may transmit diseases and cause disease in humans. Careful skin examination by a veterinarian can detect these parasites.

Fleas are readily seen in a dog's haircoat. They are pencil-lead size, brown, compressed side to side and seem to be in constant motion. They are seen most easily at the base of the tail, between the ears, or in the short hair on the abdomen. Even if the flea is not visible, black specks of excrement may be seen. Many treatments are available; however, the dog's environment must be treated just as vigorously, since the flea actually spends more time off the dog than on. Flea control should be implemented at the earliest sign of flea infestation because fleas multiply rapidly and a small problem becomes a major one in just a few days. While most dogs scratch with fleas, some dogs are also allergic to flea saliva. For them, one flea bite can set off an allergic reaction of severe skin inflammation. A flea-allergic dog will require medication to relieve the skin inflammation in addition to flea control.

Ticks are most prevalent in early spring and are most commonly found on outdoor dogs that get into underbrush and wooded areas. Ticks can transmit several diseases (including Rocky Mountain Spotted Fever) and should be removed with care. Grasp the tick near its head with a pair of tweezers and pull away from the skin with a firm tug. Do not try to kill the tick first with fire or chemicals. Disinfect the area with alcohol to prevent infection. Ticks should be controlled by daily inspection and removal or, in heavy infestations, by the regular use of chemical dips.

Lice are small, light-colored parasites that are transmitted dog to dog. They can be seen at the base of the hair. Signs of lice infestation (pediculosis) are a rough and dry haircoat, matted hair, and scratching and biting of the skin. Lice are effectively treated with a variety of chemicals available from a veterinarian.

Mange mites cause two types of mange in dogs. **Sarcoptic mange** is caused by the sarcoptic mite, a microscopic parasite similar to a chigger. These mites are transmitted from dog to dog and can also infect human skin. They burrow into the skin and cause severe itching and consequent skin irritation and inflammation. Hair loss can be severe and generalized over the body. Diagnosis by a veterinarian is essential, and treatment is usually quite effective. All animals in contact with the infected dog should be treated at the same time.

Demodectic mange is caused by demodectic mites that destroy the hair follicle in which they reside. This causes small patches of hair loss that can spread to the entire body. The initial skin lesions may become infected and are difficult to treat. The tendency to develop demodectic mange is thought to be hereditary. It is seen most frequently in purebred dogs. Demodectic mange is not contagious. Diagnosis and treatment by a veterinarian are necessary; treatment is difficult.

Ear mites tunnel in the skin of the outer ear canal. They are easily transmitted from dog to dog or cat to dog. They can be seen in the ear with magnification. Ear mites are suspected when dark coffee-ground debris is present in the ears. Infestation signs are head shaking and scratching at the ears. Left untreated, ear mites predispose the ear to secondary bacterial infection. Treatment requires cleaning of the ear by a veterinarian and use of mite-killing insecticide. Be sure to treat any other cats or dogs in the household.

❖Other Common Problems

Ear infections are a common problem in dogs, especially those breeds with a heavy earflap. Infections are caused by bacteria or yeast that grow in the ear when the ear's normal environment is changed for any reason. Ear mites, ticks, and water or grass awns in the ear can be predisposing factors. (Grass awns are slender, bristlelike appendages on the tips of many grasses. Dogs can get them in their ears as they run through fields.)

Signs of ear infections are head shaking, pawing or digging at the ear, pain, redness, and inflammation of the ear canal, and a foul smell in the ear. Any ear infection should be examined by a veterinarian for proper treatment. To prevent ear problems:

• Examine your dogs ears at least once weekly.

• Try to prevent water from getting in your dog's ears when bathing the dog.

• Ask a veterinarian for advice on wax control and routine ear cleaning.

Dental problems arise frequently and need attention. Drooling and/or foul odors coming from the mouth are signals. Regular veterinary advice and maintenance programs are necessary to prevent this disorder.

Dog anal sac problems also occur, causing considerable animal discomfort. Anal glands may become infected, causing drainage and foul odors at times. The dog may exhibit uneasy behavior such as rear-end scooting or nipping at the tail area. A simple procedure may relieve the animal; in severe cases, antibiotic treatment or surgical intervention is necessary.

Regular visits to the veterinarian are important to prevent or correct serious health problems. To provide proper care and comfort for your dog, be aware of potentially serious situations and take preventative measures.

B. Canine Vaccination:

The most common diseases we vaccinate for are described below along with our vaccination protocol. For years all dogs were given the DHLPP or "five-way" vaccine every year. This consisted of five disease components which were incorporated into a single bottle so that all could be given by one injection. Research has shown that not all components need to be given this frequently to fully protect your dog and not all dog's need all vaccines. We now give components separately, tailored for your dog's specific needs.

Diseases	Disease Description	Vaccine Protocol
D= CANINE DISTEMPER VIRUS	This is a viral disease spread by aerosol; which means that the virus particles may float about in the air after an infected animal has coughed etc. Symptoms include coughing, diarrhea, vomiting, anorexia, dehydration and weight loss. Secondary bacterial infections cause coughing, and purulent nasal and ocular discharge. These symptoms may clear up but then neurological signs develop. These include seizures, ataxia, lack of coordination, circling, blindness, and vocalization as if in pain. These symptoms can lead to permanent weakness, blindness, facial paralysis, tremors, compulsive circling, and head pressing. Often the disease is fatal. There is no specific treatment. Diagnosis is based on clinical signs or virus isolation from cells.	Puppies should be vaccinated starting at 6 weeks of age with boosters every 3 weeks until they are 12 weeks old. After this we vaccinate every 3 years.
H= INFECTIOUS CANINE HEPATITIS	This is a viral disease that affects the dog's liver. This virus is shed by infected dogs and lives in the environment for months. An unprotected dog acquires it through inhalation or ingestion. Clinical signs include depression, lethargy, abdominal	We recommend vaccinating the same as done with Distemper.

	pain, and reluctance to move. These occur in 4-7 days past exposure. The dog may recover in 3-5 days or may become, worse experiencing bloody discharge from all body openings, coagulation problems, severe liver damage and death. Most dogs recover with treatment, some do not.	
P= PARVO VIRUS	This is a virus that causes gastrointestinal disease (bloody diarrhea and vomiting) and, rarely, heart disease. It is usually successfully treated with intensive care but can be fatal. Incubation is 4-6 days before outward signs show. The virus lives months to years in the environment. This is why it is especially important not to expose your puppy to environments (like dog parks etc.) which may harbor the disease until they have had their last "puppy" vaccine. Rottweilers and Doberman pinschers seem to be at an increased risk.	We recommend vaccinating the same as done with Distemper.
L= LEPTOSPIROSIS	This is a bacterial disease that has five strains called serovars. Grippotyphosa, pomona and Bratislava are now the most common isolates from dogs, likely because the other two, icterohaemorrhagiae and canicola are what we most commonly vaccinate for. The bacteria is largely shed in the urine. It is spread by direct contact to the bacteria and via contaminated, stagnant or slow moving warm water. The bacteria cause liver and kidney damage. Clinical signs include lethargy, fever, anorexia, vomiting, dehydration, reluctance to move, icterus, renal failure,	Puppies can be vaccinated as early as 6 weeks of age. One booster 2-4 weeks later is required and then annual vaccination will protect your dog. If your dog is at increased risk vaccination every 6 months may be indicated.

	death. Treatment is with supportive care and antibiotics. Leptospirosis is also infectious to people and causes the same symptoms. It can be diagnosed by blood test which measures the amount of antibodies in the dog's blood stream. In the Rocklin, Loomis and Granite Bay area, two serovars that haven't routinely been vaccinated for have been detected and some dogs may be at risk. A vaccine has been developed that will protect against these two strains and should be considered if your dog is at risk. We recommend the leptospirosis vaccine that protects against the 4 most notorious serovars.	
RABIES	This is a viral disease that can affect all warm blooded animals. It is uniformly fatal once clinical signs develop. There is a treatment for people but it has to be initiated prior to clinical symptoms, consequently you will see this listed as a prophylaxis rather than treatment. Placer county has one of the highest incidences of Rabies cases in California. Most commonly it is seen in skunks, bats, foxes, and raccoons in this country. A common method of transmission is saliva via a bite wound but infected skunk spray can also pass the disease. Even indoor dogs should be vaccinated for Rabies. Not only is it required by law but you never know when your dog might be bitten by another dog or wild animal. The vaccine may save your dog's life. Also, if your dog were to bite a person without being previously vaccinated for Rabies, Placer county would require quarantine at a designated facility away from your pet's	All dogs should be vaccinated at 4 months, 1 year, and then every 3 years in Placer county. (Note: A vaccine given to a puppy under 4 months is not considered valid immunization by Placer county.)

home.

P= PARAINFLUENZA	This is one of many possible causes of ITB or infectious tracheobronchitis. Canine Parainfluenza is a virus. It is important to note that your dog can get parainfluenza in their own back yard by inhaling the aerosolized virus shed by another. Clinical Signs include coughing, sometimes fever, sometimes vomiting after a bout of coughing.	We recommend vaccinating yearly.
BORDATELLA	This bacterium is one of many possible causes of ITB or infectious tracheobronchitis. It is transmitted by aerosol very easily which is why many kennel facilities require it for any boarding stay. Most dogs do not die from this disease but usually keep themselves and their owners awake at night with a dry hacking cough. Treatment is usually with antibiotics.	Vaccines should be given yearly although some kennels require it every 6 months.

❖ Some commercial Dog vaccines:

(1).Primodog (2). Duramune (3). Rebisin (4).Rebavac (5). Eurican (6). Hexadog (7). Biocain

Vaccination of Dogs:-

(A).Primodog:-Produce active immunity against Canine Parvovirusis.

Dose:-1 ml/SC route.

Primary Vaccination:-One injection as of the age of 6 weeks even in the presence of maternally derived antibodies. Primodog vaccine is compatible and can be used in combination with Bivirovex (DH) and Leptodog (L) vaccines. In serious risk a second injection must be performed 2 to 3 weeks later. Primary vaccination should be supplemented as of 12 weeks of age using Merial Monovalent or associated vaccines contain canine Parvovirus component.

Booster:-One injection of vaccine one year after primary vaccination, subsequently booster every other year.

(B).Eurican (DHAPPI2-LR):- Produce active immunity against Canine Distemper, Adenovirus (Hepatitis), Parvovirusis, Para Influenza type 2, Leptospirosis *(Leptospira canicola, Leptospira icterohaemorrhagiae)* and Rabies.

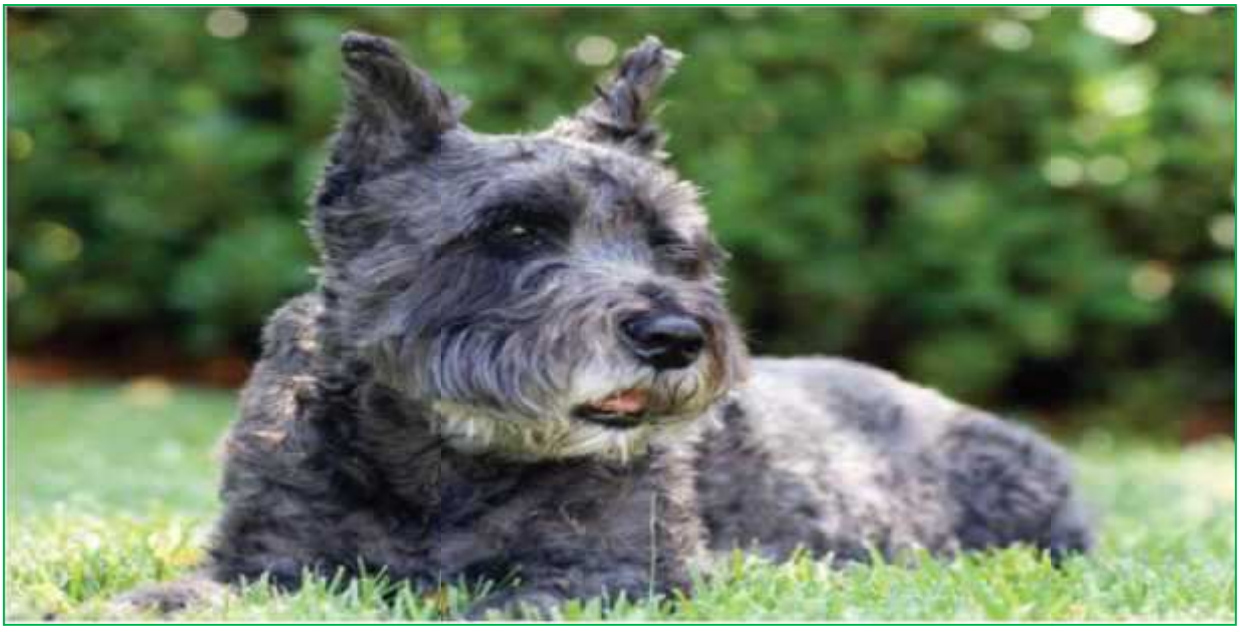
Dose:-1 ml/SC route.

Primary Vaccination:-One injection of Eurican (DHPPI2-LR) vaccine after 3 months of age.One injection of Eurican (DHPPI2-L) one month before and one month after the injection of the Eurican (DHPPI2-LR).

Booster:-Annual injection of Eurican (DHPPI2-LR) for Leptospirosis in case of serious risk semi serial booster.

VACCINATION SCHEDULE FOR DOG

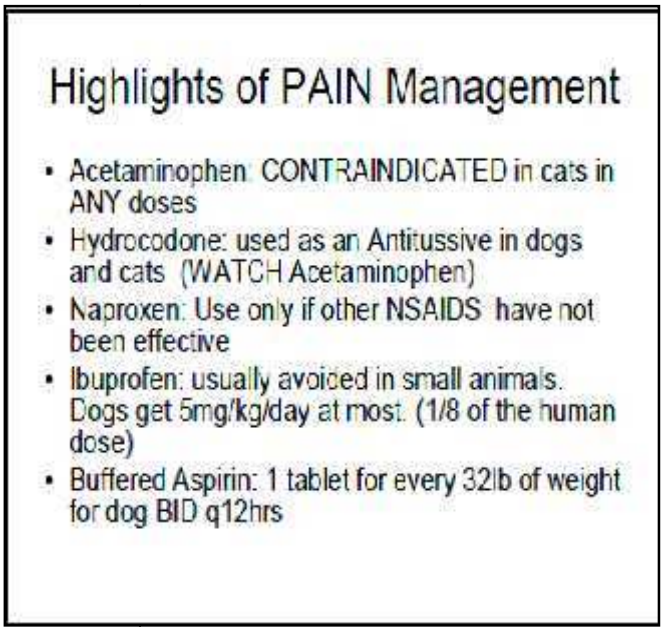
Age	Vaccination
6-8 week	Hexa dog (CD, canine hepatitis, parvovirus, leptospirosis, parainfluenza)
9-12 week	Booster dose of hexa dog
12 + week	Rabies vaccination
13-16 week	Repeat hexa dog + rabies vaccination
Repeat it annually	



C. Pet Dogs Veterinary Medicine

❖ **Treatment of Dogs with Human Pharmaceutical Products:**

PAIN MANAGEMENT



Drug	DOG	DRUG	DOG
Acetaminophen (Tylenol)	10-15mg/kg q8-12 hrs	Ketorolac (Toradol)	0.3mg/kg po BID
Aspirin (Bufferin)	10-25 mg/kg q 8-12 hrs	Meloxicam (Mobic)	0.2mg/kg-day-1. 0.1mg/kg thereafter
Etodolac (Lodine)	5-15mg/kg once daily		
Ketoprofen (Orudis)	0.5-1mg/kg BID	Tramadol (Ultram)	1-4 mg/kg q 8-12hrs

❖ **Pruritis:** sensation that provokes the desire to scratch, rub, chew or lick.

•Causes: parasites, allergic, bacterial, fungal, seborrhea, other dermatoses.

•Topical treatment therapies:

–Colloidal oatmeal (max effect 2 days)

–Lime sulfur (can stain and has a bad odor)

•Is antipruritic, anti parasitic, antifungal, antibacterial

–Topical corticosteroids are most useful. Sprays are a good choice, avoid alcohol based.

Treatment of Pruritis

•3 separate pathways lead to itching and inflammation. Steroids block all 3. Antihistamines block only 1 path.

•Tricyclic antidepressants (Elavil) : potent antihistaminic actions in dogs.

•**Hydroxyzine**: dog-2.2mg/kg/TID

•**Diphenhydramine**: dog:2-4mg/kg TID

•**Prednislone**: dog: 0.5mg/kg BID for 5-10 days. Then taper to minimum every other day dose.

❖ Motion Sickness

•Dog motion sickness is more commonly seen in younger dogs than in older dogs, just as carsickness afflicts more children than adults. The reason for this is because the ear structures used for balance aren't fully developed in puppies.

•**Antivert**(meclizine) : 25 mg/dog give one hour before traveling. (4mg/kg/day)

•**Benadryl**(diphenhydramine) 2-4 mg/kg PO every 8 hours

❖ Thyroid Disease -Dogs

•Most common: HYPOthyroidism (low thyroid). More common in medium to large breed dogs, and middle age dogs.

•Symptoms: lethargy, inactivity, mental dullness, dry or lusterless haircoat, cold intolerance, hair loss and excessive shedding. Weight gain.

•Alopecia is non-pruretic. Hair loss in friction areas.

•80% of hypothyroid dogs present with hypercholesterolemia

Treatment of HYPOthyroidism

•High TSH (thyroid stimulating hormone) in conjunction with low T4 strongly indicate hypothyroidism.

•Treatment of choice: levothyroxine

•Starting dose: .02mg/kg every 12 hours
–(66lb dog=30 kg= 0.6mg) every 12 hours.

–L-thyroxine 200mcg: 3 tablets q12hrs

Hypothyroidism-follow up

•Follow-up care: re-check T4 after one month of initial therapy. Also recheck 1 month after any change in dosage, or in generic manufacturer.

•Test for peak concentration 4-8 hours after l-thyroxine administration.

•Excellent prognosis, with normal life expectancy

❖ Treatment of Seizure Disorders with Human Meds

•Phenobarbital: 2.5mg/kg PO BID. Adjust dose based on serum levels. May use IV loading dose (20mg/kg) to achieve steady state faster. Increase dose by 50% to 100% in puppies due to increased metabolic rate. P-450 inducer. (Cats: same parameters)

•Primidone: metabolized to PEMA and phenobarb. Second line treatment. 10-30mg/kg /day. Divide to BID or TID.

•Clorazepate: Dose: 1-2 mg/kg po q12h

•IMPORTANT: Seizure failure due to Non compliance.
Owner must be counseled on importance of giving doses regularly

❖ Diabetes in Dogs

•Symptoms
–Increased urination. (may be confused for incontinence or bladder infection).
–Drinks frequently / excessively.
–Weight loss.
–Dog is often tired, lethargic or sleeps more often.

Insulin Therapy for Dogs

•Vetsulin: is a lente insulin, (intermediate-acting insulin). Is U-40 pork insulin. (currently unavailable)

•NPH (human) 0.25units/kg BID. Evaluate every 7 days.

•Lantus® (glargine) (total NPH bid dose reduced by 20%)

•Administer the injection subcutaneously, 2 to 5 cm (3/4 to 2 in) from the dorsal midline, varying from behind the scapulae to the mid-lumbar region and alternating sides.
•Glucose levels very similar to humans 100-150mg/dl

❖ Treatment of Anxietyand Phobias -DOGS

•**Fear**: apprehension associated with presence of an object, individual, social situation.
•**Phobia:**profound abnormal response resulting in extremely fearful behavior.
•**Amitriptyline or Imipramine**: 1-2mg/kg PO q12h
•**Sertraline**: 1mg/kg q24hrs x 2months. Max=3mg/kg
•**Fluoxetine**: 1mg/kg q12hr x 2months.
•**Diazepam**: 0.5-2.2mg/kg po prn
•**Clorazepate**: 0.55-2.2mg/kg q812hr
•**Alprazolam**: best choice for benzos: 0.01-.1mg/kg max 4mg for small to medium dogs.

Thunderstorm Phobias

•All meds are used off label
•Buspirone, and SSRI require 2-4 weeks for effectiveness. Give daily during storm season to control anxiety.
•Benzodiazepines for acute short term anxiety control.
•Use benzos with caution in cats, and aggressive dogs-disinhibition of aggression is possible
•Avoid TCA in breeding males, patients with seizure disorder, cardiac disease, DM, glaucoma and thyroid disease

Drugs and dosages for Thunderstorm phobias

DRUG	DOG
Fluoxetine (Prozac)	1mg/kg q24 hrs
Paroxetine (Paxil)	1mg/kg q24hr
Buspirone (Buspar)	0.5-2mg /kg po q8-12h
Alprazolam (Xanax)	.02-.1mg/kg q4-12hr
Clonazepam (Klonopin)	0.1-0.5mg/kg q12h
Diazepam (Valium)	0.5-1mg/kg q4-12hr
Amitriptyline (Elavil)	1-3mg/kg q12h

❖ Stomach Disorders-treatment of gastro-duodenal ulcers

- **Histamine-2 Receptor Antagonists**

•**Dogs :**
–Ranitidine: 0.5-2mg/kg q 8-12 hours
–Famotidine 0.5mg/kg q 12-24hrs
Treat for 6-8 weeks
Taper to prevent acid rebound

- **Proton Pump inhibitor**

–Omeprazole: 0.7mg/kg q24h for dogs

❖ HYPERTENSION: Drugs of Choice-Dogs

•CCB:
amlodipine: 0.2--0.4mg/kg q24hr
diltiazem: 0.5-1.5mg q8h
•ACEI:
enalapril: 0.5mg/kg q 12 or 24hr
benazepril: 0.25-1.0mg/kg q24hr
•BB:
propranolol: 0.2-1mg/kg q8h
atenolol: 0.25-1mg/kg q12-24hr.
Caution with BB: worsen bronchiolar disease and CHF. Watch with 2nd& 3rdAV block.

❖ Dog Bites

·80% of animal bites are attributed to dogs. 70% to the extremities.
•Facial bites occur in children under 15, and can be lethal. Mostly in adult males.
•Only 5% of dog bites get infected.
•2 distinct groups seek medical attention:
–8-12 hours after a bite. General wound care, repair of tear wounds, and rabies or tetanus shots.
–More than 12 hours. Have signs of infection and seek medical attention for
•Greatest risk for wound infection are:
–Puncture wounds are greatest risk for infection.
–No medical attention in 12 hours
–Older than 50

Dog bites

·An estimated 4.7 million dog bites occur in the U.S. each year. Approximately 25% of fatal dog attacks involved chained dogs
•Nearly 800,000 dog bites require medical care
•Approximately 92% of fatal dog attacks involved male dogs, 94% of which were not neutered.
•Approximately two-thirds of bites occurred on or near the victim's property, and most victims knew the dog
•The insurance industry pays more than $1 billion in dog-bite claims each year
•Source: Americanhumane.org

Treatment of Dog Bites

·Dog bites: 5% get infected. ***(Pasteurella canis;*** *S.aureus, Bacteroides)*
•**Drug of Choice :**Augmentin 875/125 BID or Augmentin 500/125 TID
•(alternative) Adult: Clindamycin 300mg QID + Fluoroquinolone
•Child: Clindamycin + Trimeth/Sulfa
•Source: Sanford Guide (2010 p.48)

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(Will Rogers)

Antibiotic Therapy in Dogs

DRUG	Dog
Amoxicillin	20 mg/kg q12hr
Augmentin	13.75mg/kg BID
Azithromycin	5-10mg/kg daily x5
Cephalexin	22-40mg/kg q12hr
Ciprofloxacin	5-15mg/kg q12hr
Clindamycin	11mg/kg q12hr
Erythromycin	10-20mg/kg TID
Metronidazole	30-60mg/kg once daily
Nitrofurantoin	4mg/kg q6hr
Penicillin VK	10mg/kg q8h
TrimethSulfa	30mg/kg q12hr

References:

1. **C**ommon **Dog D**iseases and **H**ealth **P**roblems *Written by Dr. Duane Rice, University of Nebraska Extension veterinarian, and Dr. Diana Longfellow, practitioner, Broken Bow, Neb. Reprinted with the permission of the Nebraska Cooperative Extension Service by Colleen Brady, Ph.D., Extension specialist, Department of 4-H Youth Development, Purdue University.* http://www.ces.purdue.edu/extmedia

2. Small Animal Veterinary Medicine, Treatment of Dogs and Cats with Human Pharmaceutical Products *by Peter A. Kreckel R.Ph Adjunct Assistant Professor of Pharmacology St. Francis University, Loretto PA program supported by PharmCon* www.FreeCE.com

3. **PCS Guide** Compiled & Presented by *MUHAMMAD SAJJAD HUSSAIN DVM (University of Agriculture Faisal Abad Pakistan)* www.dvmdocs.webs.com OR www.dvmdocs.tk