Cestodes (tapeworms) are common parasites of cats throughout North America (CAPC, 2011). The majority of tapeworm infections in cats are caused by *Dipylidium caninum* and *Taenia taeniaeformis* (Conboy, 2009). Previous published surveys have placed prevalence between 0.5% and 33% (Lillis, 1967; Amin, 1980). Lower values are from surveys based on flotation alone. Cestode infections have long been thought to be non pathogenic, although a recent case report has been published where a cat required an enterotomy to relieve an intestinal obstruction due to over 30 *T. taeniaeformis* tapeworms (Wilcox et al., 2009).

Tapeworms that are common to cats fall into 2 orders of classification; Cyclophyllidean (*Taenia, Echinococcus, and Dipylidium*) and Pseudophyllidean (*Spirometra* and *Diphyllobothrium*). Cats have to ingest an intermediate host to acquire a tapeworm infection. For example, cats ingest fleas during normal grooming. If the flea contains a cysticercoid of *D. caninum*, the cestode emerges from the flea and develops in the small intestine. As the tapeworm develops, it will produce gravid proglottids within 2-3 weeks. Another example is when a cat ingests an infected rodent intermediate host containing a strobilocerci of *Taenia taeniaeformis*. This tapeworm will develop in a similar manner in the small intestine of the host and reach patency in 5-12 weeks with proglottid production lasting as long as 34 months (Williams, 1981).

An observational study was recently conducted to determine the true prevalence of cestodes and other parasites in cats (Adolph et al., submitted). Also evaluated were risk factors for cestode infection using a Chi square contingency analysis as well as a comparative evaluation of approaches to diagnosis commonly used in practice. All cats included in the study had been selected for humane euthanasia at a local animal shelter.
following standard shelter protocols prior to inclusion in this research. Each cat was examined externally to collect any parasites or proglottids present. At necropsy, the entire gastrointestinal tract was examined and all parasites present recovered, and feces was collected from the terminal rectum for passive and centrifugal flotation.

The majority (> 50%) of the cats examined had cestodes, with infection intensity in some cats reaching more than 50 worms in the small intestine. In fact, the weight of all the cestodes in one cat, a 5 lb female, totaled over 30 grams, or over 1% of her body weight (Adolph et al., submitted). In spite of this high tapeworm burden, fecal flotation by both passive and active/centrifugal methods was not able to identify most of the T. taeniaeformis infection or any of the D. caninum infections. Infections were also not identified by examination for proglottids, which only picked up one-fifth of the infections (Adolph et al., submitted).

After performing this study, it is apparent that tapeworms were very common in these cats and that our current diagnostic methods need improvement. It is very important to take a through history when presented any feline patient, assess current and past risk factors for infection, and treat with an appropriate anthelmintic. What we learned from this study inspired us to expand our parasite control and treatment protocols for dogs and cats. To protect their health and/or reduce infection with potentially zoonotic parasites, all pets should be treated with products that prevent heartworms, treat and control intestinal nematodes and external parasites. In addition, dogs and cats need to be treated periodically with a broad spectrum “purge dewormer” based on risk factors. For cats that have no outdoor access at any time during the year, we treat with a broad spectrum dewormer once a year at the annual visit, regardless of the findings on fecal
flotation. For cats that are allowed outdoors, even if only occasionally or for limited periods of time, we treat with a broad spectrum dewormer every 90 days. Of course, we will treat more frequently than every 90 days if evidence of a tapeworm infection is present (visible proglottids).

Parasite diagnosis, treatment and preventive are areas that can be improved upon in most practices. This is an area where most pet owners want to be educated and will take appropriate action when a health care team delivers information properly. There needs to be protocols in place so that every time a pet comes in, all needs are discussed. If the owners are compliant and all needs are currently met, congratulate them on providing the best care possible and assure them they are doing all they can to assure their pet lives a long and happy life. Behavior rewarded is behavior repeated. If there are unmet needs, this is a good time to discuss them. To this end, we have protocols in place where every cat is tested for the following every year; heartworm (antigen and antibody), FIV, FeLV, and intestinal parasites by centrifugation with Sheather’s sucrose solution (SG=1.27). These services are bundled with the annual wellness exam, vaccine and deworming visit. These needs will vary depending on geographic location, but these are the needs we have determined for our feline patients in our area. After determining what the needs were, we determined the cost to deliver these services. We then determined the profit margin necessary and set the bundled price at an appropriate level.

It is our job as veterinary health professionals to be aware of what every dog and cat entering our practice needs every year need to prevent preventable diseases. Owners walk through our doors expecting the most current and accurate information possible. We need to live up to this very realistic expectation and have protocols in place so that
every team member is talking to every pet owner at every encounter about what is
needed. We are the pet’s advocate in this moment. If we can get the information we
know to be true from our team to the owner, the probability that a client makes a good
health care decision increases exponentially.

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