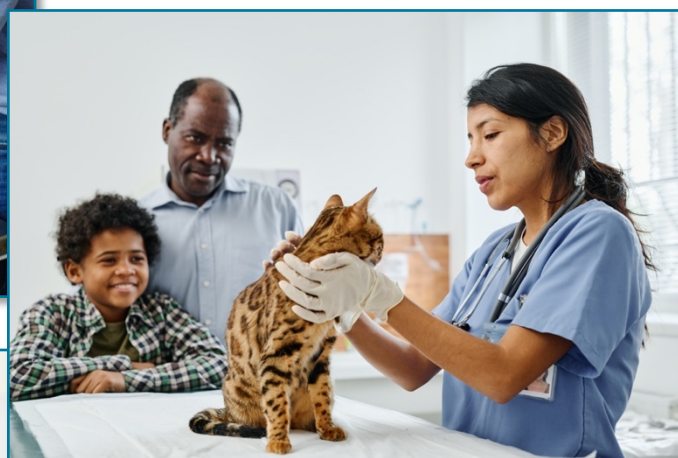


AlignCare

Serving Families, Pets and Communities

Incremental Veterinary Care Guide

updated February 2023



Maddie's
Fund

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ABOUT THE PROGRAM FOR PET HEALTH EQUITY

The Program for Pet Health Equity (PPHE) exists to improve access to veterinary care for pets and their families not adequately served by the current system. We promote and facilitate collaborations and public policy development, to remove barriers to veterinary care. Our activities include education, community service, and social and public health research. The PPHE developed AlignCare, the first One Health healthcare system to improve access to veterinary care by addressing the needs of people, their pets, and their ecosystem, largely defined by socioeconomics. We connect bonded families with Veterinary Service Providers in their communities and help develop human support networks based on principles of Veterinary Social Work, while leveraging community resources and activities.

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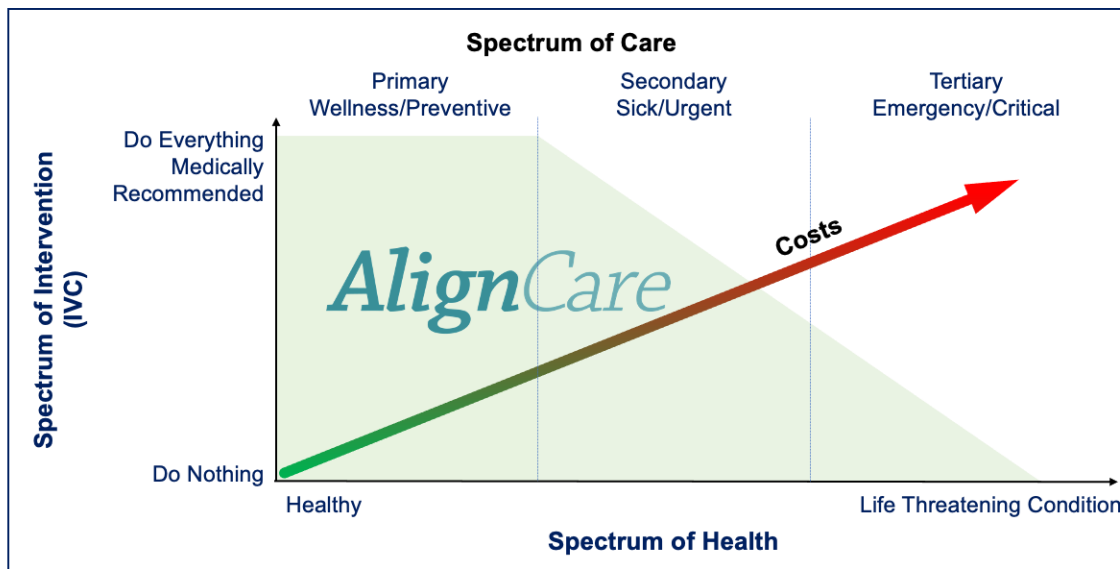
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Serving Families, Pets and Communities

Providing Clinical Care through Incremental Case Management

Incremental Veterinary Care vs. Spectrum of Care



Introduction

The purpose of this guideline is to assist the veterinary care team in utilizing incremental veterinary care as a case management strategy. While primarily intended for AlignCare Veterinary Service Providers, it is a good strategy for most veterinarians in managing their patients.

Incremental veterinary care controls the cost of care while achieving positive health outcomes for the patient. It facilitates the veterinarian-client-patient relationship and evidence-based veterinary medicine.

The AlignCare system identifies broad parameters for incremental veterinary care. A database of case management decisions and results will help to characterize evidence-based veterinary medicine and establish incremental veterinary care as a legitimate case management strategy. Information to be collected includes signalment, history, physical exam, provisional diagnosis, prognosis, case management decisions, and outcomes.

Definition of Incremental Veterinary Care

Incremental veterinary care is patient-centered, experience-based medicine, focused on a problem-solving approach to achieve the best possible outcomes for the family, safeguarding the human-animal bond in the context of limited resources. Experience-based medicine manages patient needs based on the practitioner's experience and judgment relative to various clinical presentations. The veterinarian informs the client about the most pressing issues and guides them in allocating their money towards what is most helpful for the pet.

Incremental veterinary care is a patient management strategy that utilizes the intuitive judgment of the veterinarian to develop a tiered therapeutic and dynamic diagnostic approach. Non-critical procedures are avoided to help control costs. It is a combination of the clinical judgment of the veterinarian, active follow-up of case progression, and, when appropriate, in-home care that can be provided by the client. Incremental veterinary care is weighted towards prevention and early diagnosis and intervention.

Incremental veterinary care is a viable alternative to being unable to help the patient. In those situations where gold standard care is not possible because of financial constraints, it provides an option, consequently safeguarding the integrity of the human-animal bond.

In the past, terms commonly used to describe this medical approach have been “empirical medicine” and “intuitive medicine.”

Incremental Veterinary Care Case Management Approach

Although it is difficult to address every type of case seen, the majority of clinical case presentations can benefit from an incremental veterinary care case management approach. Since the veterinary practitioner’s clinical judgment is primary to the success of this type of care, clinical experience, and exposure to a broad-ranging caseload is helpful.

Incremental veterinary care maximizes the veterinarian’s judgment based on experience. Emphasis is placed on the pet’s primary caregiver and veterinary team to closely monitor the clinical response of the patient, requiring a commitment of timely and accurate ongoing communication between the two.

The pet’s primary caregiver is the person who actively participates in the medical care of the pet and is committed to collaborating and coordinating with the veterinary team. The capability of the primary caregiver to communicate with the veterinary team, as well as carrying out recommendations, need to be considered when developing a treatment plan. These two factors are prognostic indicators.

Key features of incremental veterinary care include:

- practical-minded approach by the attending veterinarian
- medical team involvement with clear communications
- appropriate facilities and available equipment
- trained and motivated support staff
- client communication
- client acceptance and compliance
- use of technology options (e.g., telemedicine) to help control costs

The above features are important for any veterinary practice, but particularly so when diagnostic backup is minimized and veterinary judgement based

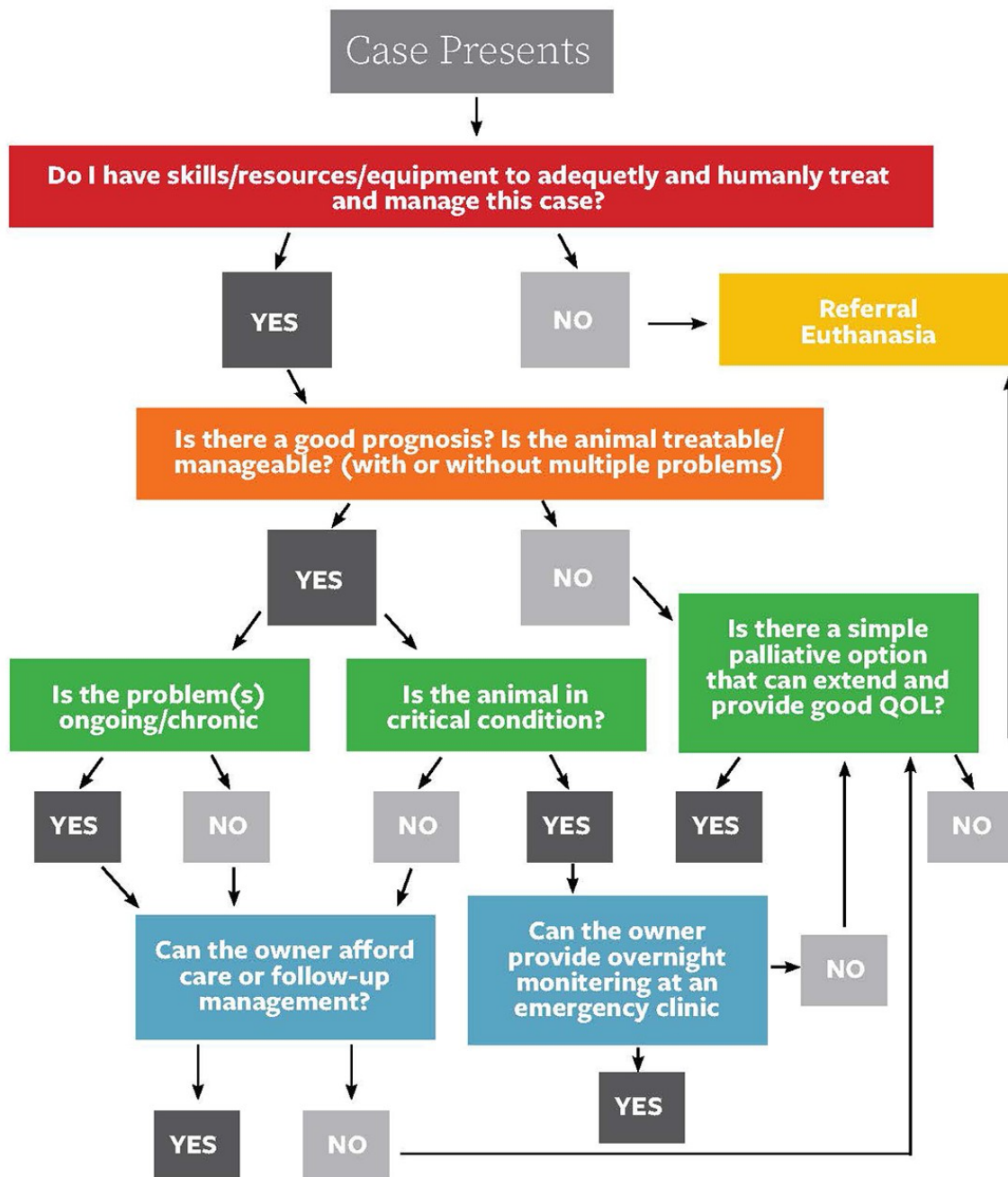
on experience is maximized, as is the case with incremental veterinary care as an approach to case management.

Although veterinarians may choose different parameters when helping a client with significant financial limitations, the following questions are suggested to be used for objective patient evaluation:

1. Do I have the skills/resources/equipment to adequately and humanely treat and manage the case?
2. Is the diagnostic testing or procedure going to change the prognosis or treatment plan?
3. Is there a good prognosis? Is it treatable? Is it manageable? Are there multiple problems?
4. If it isn't treatable or manageable, is there a simple palliative option that can extend and provide good quality of life?
5. Is the problem an ongoing or chronic condition?
6. Can the owners afford follow-up care or management?
7. Can the owners provide for overnight monitoring at an emergency Veterinary Service Provider, if it is necessary?
8. Is the patient in critical condition?
9. Would significant amounts of money make a difference in a positive outcome?



Incremental Veterinary Care Decision Tree



Note: The yellow square represents two options, referral or euthanasia. Referral could be to:

1. Another veterinarian
2. An animal rescue organization
3. Hospice

Example1. Incremental Veterinary Care Case Management

Case: Whitey

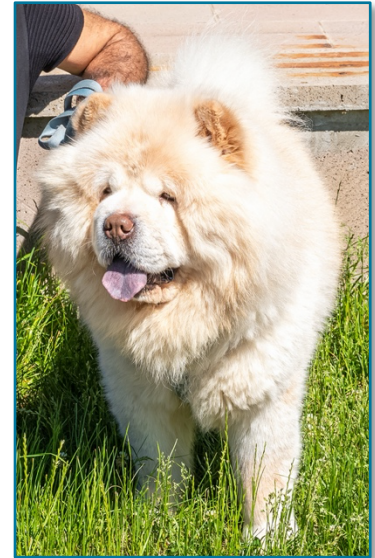
Signalment: 5 YO MN Samoyed mix

CC: Excessive scratching, squinting of right eye. Client has limited funds.

PE: Flea dirt on integument, squinting and tearing OD with a 1 cm linear corneal erosion.

A: Fleas with pruritis, corneal erosion OD

- P:
1. Fast-acting flea treatment
 2. Photograph corneal lesion OD
 3. Rx ophthalmic antibiotic ointment
 4. Follow-up with client in 2 days



Discussion:

The veterinarian felt that she needed to first address the fleas with a fast-acting flea treatment to relieve the scratching and prevent further injury to Whitey's eyes. To address the suspected corneal abrasion or ulcer, she felt she could confidently treat this condition with an ophthalmic antibiotic ointment without confirming the diagnosis with a fluorescein stain test (which would add to the costs).

The veterinarian stressed to the client that the condition of Whitey's right eye can sometimes continue or worsen. She also let the client know that if this were to happen it could result in permanent loss of vision, therefore follow up was critical. The client committed to taking a picture of Whitey's right eye in two days with his cell phone and send it to the veterinary clinic, along with written report on Whitey's progress. This picture will be compared to the one taken when Whitey was first presented. If healing was not progressing normally, or if a complication develops, the client would bring Whitey back to the clinic for additional diagnostics and treatment.

AlignCare Patient Medical Record: Components and Considerations

A medical record containing the AlignCare client's personal identifier information (e.g., name, address, telephone, etc.) and the patient's medical history and clinical findings is required. The medical record should include:

1. History and signalment
 - a. A thorough history is especially critical when using an incremental veterinary care case management strategy.
 - b. Refer to Appendix 2 for an example of history questions to be asked.

2. Physical exam
 - a. Note all abnormalities.
 - i. What abnormalities are related to one another?
 - ii. What requires the most immediate attention?
 - b. A thorough physical exam is especially critical when using an incremental veterinary care case management strategy. This includes using all of the veterinary practitioner's senses.
3. Differential diagnosis
4. Provisional diagnosis
 - a. This is the working diagnosis established after initially seeing and evaluating a patient.
 - i. The veterinarian may not be completely sure of what's going on but has a reasonably solid idea.
 - ii. The diagnosis may be revised with time and more information.
 - b. Consider if a diagnostic test or procedure being considered will change the planned course of action and/or treatment strategy.
 - c. Consider whether or not a planned course of action could be harmful without a further diagnostic testing.
5. Treatment
 - a. Considerations
 - i. Comfort for the pet (primary), like pain control
 - ii. Skill level of the attending veterinarian
 - iii. Owner's desires
 - iv. Prognosis
 - v. Resources of the owner:
 1. Cost considerations
 - a. Include recommended rechecks, ongoing medication needs, etc.
 - b. Financial contribution on behalf of the veterinary practice.
 2. Capability
 3. Time
 4. Transportation
6. Follow up and client communication.
 - a. Managing the case incrementally requires frequent communication with the client and reevaluations, either through telemedicine or clinical exam, ideally by the original attending veterinarian.
 - b. Client communication is key.
 - c. Setting realistic expectations.

- d. Client support to promote compliance, even for basic recommendations.
- e. Language/Cultural barriers may need to be addressed.
 - i. This may be a prognostic indicator.

Information about AlignCare families, pets, case assessment and management (e.g., diagnostics, treatments, prices, etc.), and outcomes will be collected electronically by the AlignCare Information System through integration with the practice management information system of enrolled Veterinary Service Providers. Until the information system is operational, the use of email and other forms of communicating is necessary. The compilation of case data will inform and broaden the understanding of and validate the efficacy/appropriateness of incremental veterinary care as an approach to veterinary medical case management.

Potential Liabilities

There are potential liabilities when practicing incremental veterinary care as a case management strategy. State licensing boards and professional liability insurance companies may not accept incremental veterinary care as appropriate medical care. However, when there are financial constraints, a veterinarian is expected to take reasonable steps to help the patient, given the financial limitations of the client. In addition, as with any case management strategy, there is always the possibility of client dissatisfaction with outcomes. Mitigating client dissatisfaction can occur by creating and guiding reasonable client expectations, including the use of signed informed consent forms to document the communication, and including the Human Support Coordinator to help resolve conflicts.

Informed Consent

Informed consent helps to protect the public and Veterinary Service Providers by ensuring that sufficient information is communicated, enabling families to reach appropriate decisions regarding the care of their animals. The American Veterinary Medical Association (AVMA) recommends that veterinarians, to the best of their ability, inform the client or authorized agent, in a manner that would be understood by a reasonable person, of the diagnostic and treatment options, risk assessment, and prognosis. The client or authorized agent should receive an estimate of the charges before providing veterinary services, and the client or authorized agent should indicate that the information is understood and consent to the recommended treatment or procedure. In addition, the AVMA recommends that there is documentation of verbal or written informed consent and the client's understanding.

There are two types of consent forms that are recommended to be used with AlignCare families, when appropriate:

- AlignCare Surgery-Procedure Consent Form
- AlignCare Euthanasia Consent Form

Animal Cruelty, Abuse, and Neglect

Suspected animal cruelty, abuse, or neglect should be reported to appropriate state agencies. Many states have mandatory reporting of animal cruelty, abuse, and neglect by the veterinarian.

Further Examples Incremental Veterinary Care Case Management

In this section, five (5) case examples of Incremental Veterinary Care Case Management are presented.

Case 1: Pappy

Signalment: 6-week-old MI Labrador retriever mix

CC: Lethargic, bloody diarrhea. Adopted from an animal welfare organization 2 days ago. Client has limited funds.

PE: T = 102.5F, pink but pasty gums, mild cough, flea dirt, no palpable obstructions, normal sclera.

A: Differential diagnosis:

1. Fleas
2. Intestinal parasitism
3. Canine parvovirus
4. Dietary indiscretion
5. Canine coronavirus
6. Canine distemper virus
7. Kennel cough

P:

1. Fecal = Hookworms
2. Subcutaneous fluids
3. Dewormer that treats hookworms
4. Bland diet
5. Antibiotics
6. Flea treatment
7. Follow-up with client the next day



Discussion:

The veterinarian recommended a Parvo test in addition to the fecal exam, but the client was unable to afford this test in addition to treatment. This case represents a common post-adoption situation in small animal practice. Management of both the animal and the

anxious/about to be angry at the animal welfare organization pet owner takes some skill and confidence on many levels by the practitioner.

Pappy can have a number of conditions contributing to the presentation described above. Canine parvovirus has to be high on one's differential list due to the severity of the disease, zero preventive care, and diminished immune status given the circumstances. Definitive diagnosis of parvovirus via in-house testing has been ruled out by the economics of the owner. Parvo tests are certainly not infallible but add a nice collaborative piece of data.

Armed with an understanding of the big picture of what this puppy has been through in the last 72 + hours can provide the caregiver with an immediate action plan therapeutically, as outlined in the "Plan" section above. Of these, the most important is a recheck within 24 hours. Rechecks are key to incremental care case management scenarios. The treatment plan is dynamic, changing with response to therapy.

Communications with the client should/must include: discussion of response to therapy as a key to potential prognosis, the absolute necessity of recheck exam, and some attempt to explain the difficult job of animal welfare organizations.

Many clinicians routinely begin the classic CSU outpatient parvo protocol to such cases. This case requires additional therapy such as flea control and the concern for respiratory issues as likely co-contributors to the animal's malaise.

After 24 hours, Pappy's response to therapy will go a long way at helping the clinician make a more focused diagnosis as to primary and secondary etiologies, as well as (of course) prognosis and the next steps in case management. This case is a perfect example of "increments" in clinical case management.

By managing the client's angst, fear, and emotions, the clinician truly provides care in a three-dimensional manner. The animal is put on a therapeutic regimen, the client is informed and brought into a state of realism, and the animal welfare organization is not vilified as the cause of the problem. These are all positive outcomes of the skill in such a caregiver.

Case 2: Fisher

Signalment: 2 YO FS coonhound/boxer mix

CC: Fisher is clinically normal but the client reports that she swallowed a fishhook 2 hours ago. Owner reports the dog is very fond of sardines. Owner was baiting the hook with minnows when Fisher grabbed the bait. Client has limited funds. Note: It is eleven thirty in the morning and the client has alcohol on his breath.

PE: No abnormalities

A: Dietary indiscretion (fishhook) leading to gastric foreign body

- P:**
1. Abdominal radiographs = Radiopaque fishhook located in the caudal stomach
 2. Feed small pieces of white bread mixed with rice and ground beef
 3. Monitor feces for the fishhook
 4. If fish hook not passed in 2-3 days, radiographic follow-up could be helpful

Discussion:

The veterinarian reviewed the following options for gastric foreign bodies with the client:

1. Referral for endoscopy and foreign body retrieval
2. Immediate gastrotomy/abdominal exploratory
3. Apomorphine to induce vomiting
4. Facilitated foreign body passage with indigestible material that coats the foreign body, allowing it to be passed.



Due to financial limitations of the owner, endoscopy is out of the question financially. An exploratory is an option if the veterinary clinic offers a payment plan to the owner. Locating a small hook within a stomach full of ingesta can be a challenge.

Induced vomiting was not recommended because of the danger of imbedding the hook or perforating the esophagus from the sharp object (fishhook). The esophagus is not to be fooled with. Surgical approach is a bit complex and the esophagus's capacity to heal is always a nightmare. Removing a fishhook that has imbedded and perforated an intestinal loop is dream compared to esophageal puncture. Choose the lesser of two potential evils.

Therefore, the facilitated passage technique was chosen. By doing this, the clinician can take advantage of the animal's normal biological mechanics to pass the foreign body. The danger with this technique is that the time dynamic requires a clinical availability component. The owner must seek immediate clinical reevaluation if the dog starts showing any symptoms relative to blockage or GI distress signaling potential perforation (i.e., vomiting, anorexia abdominal distress, rectal straining).

Most foreign bodies are passed within 72 hours by this technique. Serial radiographs can be done to observe the passage of the foreign body, which can be helpful for the peace of mind of both clinician and owner. On occasion, the foreign body can get hung up in the rectal area and be removed safely by dilation and extraction under anesthesia. This is a lot cheaper and safer than exploratory surgery.

Again, this case exemplifies the dynamic and efficiency of incremental care case management, stressing the time dynamic and clinician's skillset in managing a fluid set of potentially pathological scenarios over time.

Case 3: Nelly

Signalment: 14 YO FS Pit Bull

CC: Nelly was brought in because the client (a mother and son) was concerned about nine dermal masses, one was ulcerated. Client had been saving their money to have them removed. They were very attached to Nelly because she was the dog of her other son who had passed away.

PE: Nelly is an elderly dog but robust for her age. 8 of the 9 masses were fatty in consistency. The ulcerated mass was 2 cm in diameter. Grade IV/VI heart murmur but no signs of heart failure. Odor from the dog's mouth. Upon inspection of the mouth, there was purulent material along the gum line, root exposure, gingival recession, and broken teeth.

A: Primary problem was dental disease

Ulcerated mass

Suspect multiple lipomas

P: 1. Dental with multiple teeth extractions

2. Mass removal of ulcerated mass with histopathology

3. Antibiotics.

4. Pain medication



Discussion:

Veterinarian explained that the smell from Nelly's mouth was due to the dental disease and consequential infection, is a very painful condition, and could contribute to heart disease. A discussion ensued that the money allocated towards Nelly's care would be more beneficial to use to address her dental disease rather than address some masses that frightened the owner but were actually not detrimental to Nelly (other than the ulcerated mass, which was suspected to be a mast cell tumor). Due to a lack of finances, no preanesthetic bloodwork was done because it would not likely change the course of action. After the procedure, the families were really pleased and reported that Nelly was happier, her eating was improved, and she had a better quality of life. They explicitly said that they felt that the veterinarian had really helped Nelly and were so thankful.

Case 4: Alexa

Signalment: 1 YO FI Pit Bull

CC: Vomiting one week ago but has not vomited for 3 days. Previously diagnosed with a foreign body at another clinic 5 days ago. Surgery was recommended but not performed due to client's inability to pay projected estimate upfront. Currently experiencing anorexia and lethargy. Client has limited funds and also does not speak English.

PE: T = 102.5F, moderately dehydrated, slight discomfort upon abdominal palpation, muddied, reddened mucous membranes, normal to slightly increased heart rate, growling, owner reported lethargy at home, but dog is BAR in the room.

A: Previously diagnosed foreign body (evident on radiographs taken at other clinic and emailed with patient), anorexia

P: 1. Discussed with the owner (through an interpreter) the possibility/likelihood of a poor prognosis due to length of time of foreign body presence.

2. Offered an exploratory surgery with the agreement of euthanasia under anesthesia if perforations or other extensive or non-repairable damage to GI tract.

3. Helped owner obtain voucher from Humane Society and worked through other financial agreements/options.

Discussion:

While diagnostics are important and helpful for gaining a complete picture of a patient, there are times in limited funds situations where available money needs to be prioritized towards treatment. In this situation, the owner had spent a significant amount at another hospital on bloodwork, radiographs, and rechecks without gaining surgery to fix the problem. She had then been referred to go to the local emergency hospital at the start of the weekend where she then incurred high costs for an additional exam and bloodwork. She was declined for needed surgery again for lack of available funds. The dog and owner continued to wait. She then came to this veterinarian's clinic for examination. While it was discussed that the duration made for a poor prognosis, the dog was reasonably bright and young and the owner had strong feelings of wanting to make the attempt to save her, therefore the ensuing agreement of euthanasia if poor prognosis. Upon entering the abdomen, the dog had eaten some type of stringy, fibrous material, caught in her stomach and extending to the large intestine. There were multiple perforations present and prognosis was poor. The patient was euthanized.



Case 5: Stitch

Signalment: 12 YO MN DSH cat

CC: Increased drinking, urination, and unchanged or increased appetite for about the last month. Weight loss noticed but has become more apparent recently. Owner reports he used to be very overweight and weighed approximately 16 lbs. (he now weighs 9 lbs.). Client is distressed and reported she has difficulty paying the exam fee.

PE: Dehydrated, very thin with severe muscle wasting, slightly to moderately depressed in demeanor, fleas present, significant dental disease, auscultated normally and no masses palpated in abdomen.

A: Suspect diabetes mellitus and/or cancer

P: 1. Discussed with owner the top suspicion of diabetes mellitus.

2. Offered to screen for glucose in the urine as an inexpensive test. Owner unable to afford urine testing.
3. Discussion ensued over cost of treatment for a diabetic cat and the possibility of another disease process causing significant wasting/weight loss.
4. Owner opted for euthanasia due to complete lack of funds and poor prognosis if not diabetes.

Discussion:

The cat's significant and severe weight loss, muscle wasting, and demeanor indicated advanced disease. While diabetes mellitus was the primary rule-out, the treatment is considered expensive by many people, especially initially, and requires regular and/or frequent follow-up appointments with recommended lab work. This level of financial commitment was insurmountable for this owner. Additionally, if Stitch were not diabetic, the chronic nature and progression of whatever disease process would likely indicate a poor prognosis with few, if any, treatment options. The decision to euthanize helped the owner feel her cat would not continue to decline or suffer and empowered her to take care of him in the best way she could.

