

## FELINE GERIATRICS

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Longevity may be a hereditary factor in cats, as some show senile changes at 10 years and others are healthy at 20. The first evidence of senility is disregard of house training. Many old cats become less fussy about digging holes and covering excreta. They may use corners of the house and especially tubs and sinks, with no signs of guilt. Punishment is not the answer; the owner must decide to live with it or consent to euthanasia for the cat. Similarly, attention to the fur decreases and the owner must take over the grooming. Agility decreases, but sight and hearing are not affected as in old dogs. Nails grow long because of less exercise and atony of the retractor muscles. Regular nail clipping is often needed. Old cats may become thin and frail without obvious cause and, with their decreasing metabolic rate, need extra warmth. They should not be left out at night. Food should be highly nutritious, easily digested, and given frequently in small portions. For adequate vitamin intake, concentrated supplements may be required.

Liability to dental calculus, paradontal disease, and alveolitis increases with age and the mouth should be inspected regularly. As nephritis and diabetes mellitus can cause excess tartar, the urine should be checked. Teeth should be extracted at any age, if indicated. Intubation is not easy and face masks are inconvenient; thiopental sodium i.v. is probably the best anesthetic. Carcinoma and inflammation of the tongue are common, and difficult to differentiate. Carcinoma may also occur in the tonsils, pharynx and esophagus, rarely in the stomach. The stomach and esophagus are less liable to senile change. Atony of the anal sphincters may cause incarceration of a knob of feces which can be expelled by digital pressure. If this does not afford relief and the colon is full of large fecal masses, megacolon should be considered. Atony of the colon leading to megacolon is usually first evident in middle rather than old age. Sympathectomy might be a better treatment than resection.

The pancreas may fail in aging cats. Exogenous deficiency is characterized by increased appetite with loss of weight; loose feces are persistent but not necessarily bulky or fatty. Trypsin tests should be made several times, as result vary even in normal cats. A persisting titer below 1:20 is suggestive. Keratin-coated tablets or granules of pancreatin, preferably with bile salts, give excellent results. Dosage is based on response. Adenocarcinoma of exogenous tissue is reportedly common. Diabetes mellitus occurs oftener than generally believed, especially after the age of 8. Signs are polydipsia and increasing weight loss, with appetite first increased and then decreased. Lens opacity is less frequent than in dogs. With insulin treatment, life expectancy may be 6 years or more. The dose usually is 5-11 units daily of protamine zinc or zinc suspension lente insulin. Keeping the urine constantly negative risks hypoglycemia, and the weight, water intake and appetite are more important criteria. Fatty degeneration of the liver occurs in

diabetes mellitus. Chronic passive congestion associated with right heart lesions is often not observed until terminal phases. Cirrhosis occurs as in the dog, and may follow idiopathic jaundice with renal signs. Liver neoplasia is common, frequently lymphocarcinomatous involvement, adenocarcinoma, or metastases from other sites. Liver disease usually causes anorexia and weight loss, nausea and some depression.

Neoplasia of the nasal cavity should be suspected if an aged cat has a unilateral discharge. Radiography is not necessarily helpful in diagnosis, but if the discharge is accompanied by wasting, euthanasia is justified. Lymphosarcoma is frequent in mediastinal and bronchial lymph nodes, and empyema is common in the thorax of cats at any age. Bronchitis is also common in winter in all cats, but pulmonary emphysema occurs rarely if at all. Pulmonary congestion, often associated with effusion, occurs in left-heart failure but heart disease is often inapparent until the stage of failure. It is rarer in old cats than dogs but the prognosis is grave. Cyanosis on minimal exertion, dyspnea, and sternal position with abducted elbows may appear suddenly. Most cats are unable to tolerate the digitalis group. Murmurs may not be evidence of cardiac insufficiency, and the significance of tachycardia, common in old cats, is unknown. Arterial thrombosis is a hazard of middle rather than old age; resulting kidney infarcts can cause renal insufficiency. Anemia is not uncommon but the cause may be obscure. It may be secondary. The tongue color is a better guide than mucous membranes, which may be pale normally. Occasionally there may be good response to vitamins.

Swollen, painful joints with periarticular changes, perhaps accompanied by malaise and anemia, may respond to corticosteroids. Septic foci such as teeth should be treated. Any firm swelling associated with the bone of limbs, trunk, or skull in a cat over 6 years old should be radiographed. Malignant bone tumors are fairly common, and may appear to arise simultaneously from several sites.

Epileptiform convulsions occasionally develop in middle or old age. Small doses of primidone, phenytoin or potassium bromide may be satisfactory treatment if the patient can be easily and regularly dosed. A stroke syndrome occurs commonly, with sudden onset and unilateral signs. A fair proportion of patients recover spontaneously in 1-3 weeks. Locomotor ataxia may sometimes be of central origin. No records of brain tumors are known. Older cats may have stillborn kittens, then smaller litters, then abortion at 42-52 days, and finally infertility and endometritis. Spaying is indicated. Pyometra and endometritis are common in unbred females in middle and late life, and mammary neoplasia in old queens that breed regularly. The more anterior mammae are usually affected; malignancy is commonly high and metastasis early.

Aged cats may have chronic interstitial nephritis of unknown etiology, with no apparent relation to leptospiral agglutinins. Signs are thirst, dullness, lack of appetite, and weight loss. Vomiting may not occur, but in late stages ulcers in the pharyngeal region may cause dysphagia. The uremic odor is ammoniacal in cats. Kidneys are often

smaller than normal, sometimes unilaterally, and surface irregularity may be palpable. Urine dilution may be minimal, but protein is usually present. Sulfosalicylic acid is the best test for protein, as impregnated strips may give false positives. Lymphosarcoma is the only common neoplasm and may be primary or secondary. Thirst, some wasting, and dilute urine are usual but proteinuria may not occur. In advanced cases, enlargement of the kidneys, and perhaps distortion, are readily palpable. Splenomegaly due to massive infiltration of mononuclear or plasma cells seems peculiar to the cat. There may be vomiting and inappetence, weight loss and anemia. Palpation of the enlarged spleen cannot rule out lymphosarcomatosis. Response to splenectomy is excellent. The spleen may be the primary site of reticulum cell sarcoma or metastatic carcinoma as well as lymphosarcoma. The most significant affections of lymph nodes in older cats probably are lymphosarcoma and a lymphatic leukosis resembling Hodgkin's disease. Palpable lymph nodes are usually bilaterally enlarged in the latter case, and spleen and liver may be involved. Biopsy confirms the diagnosis, but there is no satisfactory treatment.