

## Other Types Of Bird Cancer

### Learn about other types of cancer birds can develop

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Cutaneous papilloma, a type of skin mass, is most commonly found on African grey parrots.  
Courtesy Daniela Slanina, California

Many birds that tend to be overweight or downright obese are prone to developing tumors called lipomas or xanthomas. Although these tumors are benign (non-malignant), they may continue to grow larger and interfere with normal movement. Lipomas can occur in multiple areas of the bird's skin, and the skin over the large masses may ulcerate from the birds picking at them or from loss of blood supply. Lipomas are not true tumors, but may occur in multiple locations, acting like benign masses. Liposarcomas, which rarely develop, have the appearance of lipomas and are usually found in the area of the keel bone or uropygial gland. These cancers have the potential to invade nearby tissues and can also metastasize to other areas of the body.

Skin cancer is not common in pet birds, most likely because they are not exposed to the damaging rays of sunlight, as many outdoor birds are. Squamous cell carcinoma, a common human skin cancer, has been diagnosed in chickens and other free-ranging birds. Fortunately, this is one type of cancer that we won't need to worry about in pet birds, even those with bare facial skin, unless they are exposed to high levels of damaging ultraviolet rays from the sun.

Another type of skin mass found in birds, most commonly African grey parrots, is the cutaneous papilloma. These are most often located around the eyelid, junction of the beak and face and on the feet and legs. Papillomas are viral-induced in African greys, and I mention this because internal papillomas (also most-likely viral-induced) can also undergo malignant transformation to become squamous cell carcinoma. These may be found anywhere along the gastrointestinal tract.

Other cancers that affect the digestive system include pancreatic adenocarcinoma (cancer of the pancreas) and cholangiosarcoma (cancer of the bile duct). These can occur in birds with internal papillomatous disease, which is thought to be associated with a herpes virus. Cancer of the proventriculus occurs more frequently than cancer of the ventriculus. Rarely, cancer involving the intestines occurs. Some cases of masses and neoplasms of the cloaca have been diagnosed, most frequently in Amazon parrots.

Cancerous lesions can occur in the liver or bile duct. Often, multiple masses may be observed within the liver tissue itself, or a single tumor may be present. Carcinoma of the liver is often difficult to diagnose in the early stages, and by the time the tumor is large enough to be noticed (usually by abdominal swelling), it may be too late to save the bird. Sometimes, there will be a large amount of fluid in the coelom from the damage to the liver.

Radiographs, ultrasound, endoscopy, laparoscopy or biopsy may be used in diagnosing some of these tumors. If a tumor is restricted to one lobe of the liver, it may be possible to excise that portion of the liver, however, these tumors may spread to the lungs, so it is always important to confirm that the lung fields look clear prior to attempting surgical removal of a solitary liver tumor.

The uropygial gland may develop a malignant tumor, and these are most often seen in the budgerigar and canary. The gland (which is normally bilobed, heart-shaped and located at the base of the tail on the back) has a wick feather that the bird preens and then applies the secretion to the feathers. Not all parrots, however, possess an uropygial, or preen, gland.

Primary lung tumors or cancer in the respiratory system are uncommon in parrots, but the lungs are often the site for metastatic neoplasia. Fibrosarcoma, adenocarcinoma, hemangiosarcoma, malignant melanoma, mesothelioma and osteosarcoma may all travel to the lungs in cases where the primary tumor has spread.

Occasionally, tumors arise from blood vessels. These are found in the skin, liver, lung, spleen, muscle, mesentery, kidney, heart, oviduct, bone or other tissues. They may occur singly or in groups, but all are dangerous types of cancer, capable of invading locally or spreading to distant tissues, such as the lung, liver or heart muscle.

Although not common, tumors of the muscles, leiomyosarcoma (from smooth muscle) or rhabdomyosarcoma (skeletal muscle in origin) can occur. Cancer originating from cartilage or bone are also occasionally seen. Osteosarcomas, which originate in the long bones of the wing or leg, can be dangerous. It can also appear on the rib, skull, eye socket, toe

or tail bone. This type of tumor may erode through the bone, resulting in a spontaneous fracture of the bone. Amputation of the limb containing an osteosarcoma lesion is usually the best course of action.

Leukemia and lymphosarcoma are two more dangerous types of cancer. These involve white blood cells and the lymphatic system, respectively. Leukemia causes abnormalities in either lymphocytes or granulocytes, two cell lines of white blood cells. I have most often seen leukemia in adult macaws. In spite of aggressive chemotherapy in several cases, none went into remission.

There is a close association between the virus responsible for Marek's disease and certain cancers in chickens. Because of this, there are suspicions that some leukemias in birds and other species may be associated with specific viruses, as well.

With the new chemotherapeutic agents, chemotherapy medications, surgical techniques and concentrated radiation treatments, cancer is not always a death sentence for avian patients. Many more birds are surviving for years after being diagnosed with cancer.

If your bird has been diagnosed with a malignant tumor, ask your avian vet if your bird should be referred to a specialist or referral center for appropriate therapy. Aggressive surgery or therapeutics after thorough diagnostic testing will give your pet the best chance for a cure from many types of cancer; however, time is always of the essence. So, if you find a suspicious lump or bump, have your bird examined and evaluated as soon as possible so that appropriate diagnostics and treatment can be instituted. It's the best way to ensure that your bird will live a long and healthy life.