

## **Diagnostic Approach Using Computerized Tomography and Successful Surgical Resolution of a Palatine Luxation and Entrapment in a Blue and Yellow Macaw (*Ara ararauna*)**

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*Abstract:* A seven-month-old male blue and yellow macaw (*Ara ararauna*) was presented with an inability to move the maxillary beak after flying into a clothesline. Unsuccessful attempts to reduce the beak were performed, first by the owner at home and later within the same day by the referring veterinarian under general anesthesia. The patient was referred for assessment and treatment 5 days later. A palatine luxation and entrapment with a possible fissure of palatine bone was suspected based on history, a physical examination, and radiographic imaging. Another unsuccessful attempt to manually reduce the beak was performed under general anesthesia. A computed tomography (CT) scan was scheduled to evaluate the skull further. Rostradorsal displacement and entrapment of the palatine bone on the rostral edge of the interorbital septum in the mesethmoid region were identified. In addition, the CT images provided useful information for the veterinary team to rule out other skeletal abnormalities, rendering a significantly more detailed evaluation of the skull bones before surgical intervention. Surgery was performed after the previously published pin insertion method over the dorsal aspect of the palatine bone. Pressure in the ventral direction was then applied on the pin while simultaneously further hyperextending the maxillary beak to unhook the palatine bone from the interorbital septum. The present case report describes an in vivo diagnosis of palatine luxation and entrapment in a blue and yellow macaw by means of a CT scan and successful surgical resolution.