## Proventricular intussusception

## in a Yellow Rosella (Platycercus flaveolus).

# UMA Intussuscepção proventricular <br> numa Rosela amarela (Platycercus flaveolus) 

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#### Abstract

An intussusception is a situation in which a part of the gastrointestinal tract has prolapsed into another section of intestine, similar to the way in which the parts of a collapsible telescope slide into one another. The part which prolapses into the other is called the intussusceptum, and the part which receives it is called the intussuscipiens. This type of pathology is usually associated to the intestine tract of mammalian species. The author witnessed an unusual case of intussusception, affecting the proventriculus and ventriculus of a Yellow Rosella (Platycercus flaveolus) presented in advanced stage of disease. Although the diagnosis was made post-mortem, the bird was in a too severely debilitated status to have survived surgery, the only effective resolution for these cases. The following article gives a description of the case.


Resumo: A intussuscepção intestinal ocorre quando um segmento proximal do tracto digestivo (intussuscepto) telescopa dentro do segmento distal (intussuscepto). Este tipo de patologia é comum no tracto intestinal dos mamíferos. O autor testemunhou um caso raro de intussuscepção do proventrículo no ventrículo numa Rosela amarela (Platycercus flaveolus).
Encontra aqui uma descrição do caso clínico.

## CASE DESCRITPION

A 10-year-old, female Yellow Rosella (Platycercus flaveolus) was presented for severe depression, having been found on the floor of the aviary, in evident pain and discomfort.
Upon physical examination the bird showed a moderately reduced body condition (score 2 ), tachypneia and a soiled vent area. Abdominal palpation was obviously painful.
The bird received emergency care therapy, which included 5 ml of subcutaneous fluids (warm mix of Ringer's Lactate and 5\% Dextrose in equal parts), Enrofloxacine (10 $\mathrm{mg} / \mathrm{Kg} \mathrm{IM}$ ). Febendazole ( $15 \mathrm{mg} / \mathrm{Kg} \mathrm{PO}$ ) was also administered, given the high suspicion of intestinal parasites (Rosellas, as with most australian parakeets that spend much time in the ground, are more susceptible to infestation with
ascarids). The bird was then put in a semi-dark, warm incubator.
Despite all efforts the bird's condition quickly deteriorated and it perished a few hours after arriving to the clinic.
Necropsy was preformed within half an hour after death.
Upon removing the sternum, the problem was quite evident, as the proventriculus was partially intussuscepted in the ventriculus (fig. 1a, fig. 1b).
There was some straw-colored fluid in the celomic cavity, with no evidence of blood. After careful removal of the gastro-intestinal tract, blood in the intestinal content was also evident (fig. 1c). There was no evidence of peritonitis.
Upon opening the ventriculus, abundant digested blood was present inside, as is typical
of these situations. The mucosa was very congested and severely oedematous (fig. 1d). No parasites were found in the proventriculus or ventriculus (direct visualization and decantation of the gastric content).


Figura 1- Necropsy was preformed within half an hour after death. 1a) Upon removing the sternum, the intussusception of the proventriculus into the ventriculus was evident; 1b) Lateral view of the intussesception; 1c) Proventriculus, ventriculus, pancreas and intestine of the bird with hemorrhagic content; 1d) Melena and oedema of the ventriculus mucosa.

## CONCLUSION

Intussusception is a telescoping of one segment of the digestive tract into an adjacent segment. Although in theory it can happen in every part of the digestive tract, it is most commonly seen in the intestinal tract of carnivores, in the form of ileo-colic intussusception or jejuno-jejunal intussusception. They are usually associated with active inflammation that severely disrupts the motility and promotes the narrower segment to get into the lumen of the broader one ${ }^{(4)}$.
The compromise of the local circulation usually leads to devitalisation of tissues and passage of bacterial toxins. There can also be rupture of the organ following devitalisation and subsequent loss of integrity.
There is no medical treatment for intussusception; only surgery can resolve it. Even in mammals, were intestinal intussusceptions are more frequently found, the
prognosis for surgery is often moderate to guarded, especially if septic peritonitis is already installed. It frequently involves resection of the affected intestinal parts ${ }^{(4)}$.
In this case, the gastric walls seemed to still be viable, but even if the diagnosis had been made in vivo, the patient would not have survived the procedure, as gastric surgery is highly invasive in birds and this one was severely debilitated already.
The author found no references to other cases of provenriculo-ventricular intussusception in the literature ${ }^{(1,2,3,5)}$.

## REFERENCES

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