Cloacal prolapse in immature ostrich hens

D Black
Springvale Veterinary Clinic
570 Springvale Road
Springvale South 3172

Prolapses of the cloaca, rectum, oviduct and phallus can all occur in ostriches from chick to adult. It is important to determine the exact nature of the everted tissue as well and the underlying cause before making a choice as to the appropriate course of action.

Rectal and/or cloacal prolapses are not uncommon in chicks. They may be secondary to underlying impactions, enteritis (secondary to infection, nutritional factors or sand irritation), gastro-intestinal obstructions or intestinal volvulus. With this diverse list of possible underlying causes it is critical to investigate these possibilities before attempting treatment. This treatment could range from simply placing a purse-string suture around the vent in conjunction with necessary nutritional management changes through to exploratory laparotomy to detect and correct a possible impaction or intestinal volvulus.

Oviduct prolapses uncommonly occur in adult hens. These are usually secondary to an underlying endometritis or egg retention. It should be noted that many cases of egg retention can go unnoticed for several months or even years before detection. The common acute symptoms normally associated with egg-retention in other avian species are often not seen in ostriches.

Prolapse of the phallus in adult male ostriches can be due to trauma or sexual "overwork". This is a particularly difficult problem to deal with and conservative treatment involving sexual rest and topical/systemic antibiotic treatment if required should be the first choice unless phallic damage is severe. It should be noted that phallic prolapse in an adult male ostrich is not necessarily an emergency condition - some male ostriches have performed adequately with good fertility, serving one or two hens over an entire breeding season while suffering with phallic prolapse. This is obviously undesirable both from the long term prognosis of the cock and the possibility of secondary infection to both the cock and the hen. However, it does caution us not to necessarily feel the immediate need to replace the phallus and perform a follow-up purse-string or equivalent suture technique with its inherent possible complications.

Prolapse of the Cloaca

The condition I want to specifically address is a syndrome seen commonly in immature ostrich hens. These hens are generally aged between 15 and 20 months. It is not uncommon in these immature hens to occasionally see the passage of blood and mucinous material from the vent. I believe this coincides with the production of this fluid from the immature oviduct

together with the development of the patency of the distal oviduct opening into the ventral urodeum of the cloaca. However, in some hens this distal oviduct opening is not patent. The resulting mucinous material produced by the immature oviduct builds up in the distal oviduct and vagina. The hen eventually strains because of the resultant swelling and pressure and will then intermittently prolapse this tissue. One of three sequelae will result:

a) The material is insufficient in volume to maintain clinical signs. The condition will settle and the hen will become asymptomatic. The distal oviduct opening may not become patent until later in life, resulting in passage of the previously mentioned blood and mucus or the passage of the hen's first egg with significant blood-staining to the outside of the shell.

b) The straining will result in the tearing of the distal oviduct opening causing immediate passage of blood and mucus.

c) The material continues to build-up and patency is not established, resulting in a permanently visible prolapse.

These latter cases require immediate veterinary intervention. This problem is very simply and easily dealt with in the early stages but, as time goes by, the problem becomes more severe and far more complex to resolve.

In the early stages a spherical swelling of up to 10-12 cms in diameter is seen. Simply replacing the prolapse and placing a purse-string or equivalent holding suture will NOT resolve the problem and only lead to unnecessary complications.

Surgical resection of tissue will involve general anaesthesia and a real risk of affecting the future egg-laying ability of the hen. The ureteral opening can be involved in the prolapse end excision of this area will obviously have dire consequences.

The treatment of choice at this early stage of the condition is to drain the mucoid material from the prolapsed structure by making a ventral stab incision after adequately cleansing and disinfecting the area. The fluid can then be "milked" out of the prolapse, and the tissue replaced through the vent without the need for holding sutures to be placed. Prophylactic antibiotics can be given systemically by intramuscular injections, or by the introduction of local antibiotics using a bovine uterine pessary. It is not uncommon for these hens to go on and lay

fertile eggs without complications during the ensuing breeding season (even as early as a few weeks after the procedure). The whole procedure can be done with the hen "hooded" and minimal restraint; without the need for local or general anaesthesia or sedation.

If treatment is not instigated early the prolapse will increase dramatically in size due to severe secondary inflammation and oedema. This begins as a second discrete swelling on the right hand side portion of the everted cloaca and quickly increases in size (even up to 30 cms or more in diameter) leading to secondary complications such as constant straining, constipation, avascular necrosis and sloughing of mucosa and secondary infection and septicaemia.

In this situation drainage of the distal oviduct portion of the prolapse is carried out as described above. However because of the size of the prolapse the hen will inevitably prolapse again after replacement through the vent. With the hen "hooded" and using local anaesthesia the tissue can be reduced in size as much as possible, using hypertonic fluids, then replaced and a purse-string or equivalent holding suture can be placed. I use Dacron tape threaded through a large bovine vulval needle because it is possible for smaller suture material to tear through tissue with the enormous power of the hen during straining. Systemic anti-inflammatory treatment and local and systemic antibiotic treatment are necessary.

The suture has to be tight in order to trap the tissue within the cloaca during straining. Consequently secondary constipation will result. The use of faecal softeners such as Coloxyl® can be helpful. It is also important not to leave the suture in place for more than 48-72 hours without checking the cloaca after loosening the suture (hence another reason for Dacron tape as it can easily be fastened and unfastened). If the hen fully prolapses again and is not becoming severely constipated the suture can be retightened. If the prolapsed tissue has become extensively necrotic surgical excision under general anaesthesia may be required. If the tissue remains viable but continues to prolapse then an alternative surgical technique such as a cloacopexy may need to be attempted under general anaesthesia. These latter techniques are difficult but technically feasible, however the future egg-laying ability of the hen could well be compromised.