

## DUBBING OF OVERGROWN COMB IN A LEGHORN COCKEREL WHITE

M. Vigneswari\* and A. Barani

### Abstract

A 6 months old white leghorn cockerel weighing 1.8kg was presented with the history of overgrown comb with maggot infestation and covering of the left eye. After treating the maggot wound, dubbing was performed under general anaesthesia with inj. xylazine @ 2 mg/kg body weight, inj. Ketamine @ 20 mg/kg body weight, inj. Tramadol @ 4 mg / kg was administered intramuscularly. A curvilinear incision was made below the necrotic part and the overgrown comb was dubbed. The incision site was closed by simple interrupted suture pattern using braided silk size 0 and bandaged. Postoperatively, the bird was treated with inj. Enrofloxacin @ 15mg/kg b.wt for 3days and inj. meloxicam @ 0.5mg/kg body weight for 2 days. Sutures were removed on 10<sup>th</sup> postoperative day and the bird made an uneventful recovery.

**Keywords:** Dubbing, overgrown comb, white leghorn cockerel

### Introduction:

Chicken combs are an essential part of the chicken's body that help to serve as a radiator in cooling the bird in hot weather. Large comb in male attracts female chicken because it implies that the male chicken is very healthy and likely to pass on strong genes to their offspring. However, larger comb can be injured or damaged due to pecking behaviour as well as during winter season, frost bite can occur. To prevent further damage to the comb, partial resection of overgrown comb is advisable (Muhtar and Khan, 2012). Dubbing is the method of partial removal of comb in bird. As comb is a male dominated excrescence and largely composed of collagen

fibres and mucopolysaccharides (Nakano and Sim, 1988). The high water holding capacity of hyaluronic acid may be important for the comb, which must protrude from the head (Nakano and Sim, 1988). A healthy bird will normally have a bright, red comb. The development of the comb is associated with hormone levels in the body, which affects both productive and reproductive performance (Muhtar and Khan, 2012). The present paper describes about the surgical management of overgrown comb in a white leghorn cockerel.

### Case history and Observation

A 6 months old white leghorn cockerel weighing 1.8kg was presented to the Department of Veterinary Surgery and

*M. Vigneswari\* and A. Barani*

*Department of Veterinary Surgery and Radiology,  
Rajiv Gandhi Institute of Veterinary Education and Research (RIVER),  
Kurumbapet, Puducherry, India*

Radiology, VCC, RIVER, Puducherry with the history of overgrown comb with maggot infestation and covering of the left eye. On the day of presentation, the bird was filled with maggot infestation on the overgrown comb, which was entirely covering the eye (**Fig 1**).



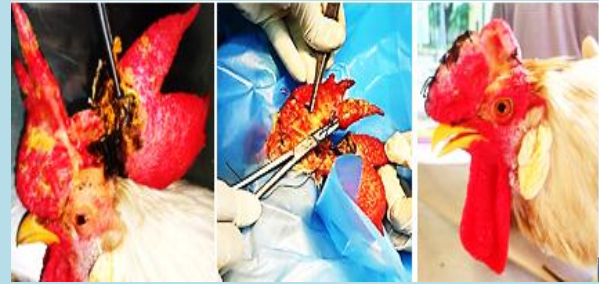
**Fig 1:** Maggot infestation on the overgrown comb

On clinical examination, maggot wound was noticed at the base of the left side of the comb, necrotic parts were seen on the edges, bird was unable to open the left eye due to pain. On haematological examination, haemoglobin was 8.4 g%, and packed cell volume was 28%. Based on the clinical examination and haematological value, the bird was subjected for dubbing procedure with overnight fasting.

### Treatment and Discussion

After treating the maggot wound, dubbing was performed under general anaesthesia with inj. xylazine @ 2 mg/kg body weight, inj. Ketamine @ 20 mg/kg body weight, inj. Tramadol @ 4 mg / kg was administered intramuscularly. The comb was prepared aseptically. A stay suture was applied

on either end of overgrown comb and a curvilinear incision was made below the necrotic part and the overgrown comb was dubbed. The incision site was closed by simple interrupted suture pattern using braided silk size 0 and bandaged (**Fig 2**).



**Fig 2:** Dubbing was performed after removal of the necrotic part

Postoperatively, the bird was treated with inj. Enrofloxacin @ 15mg/kg b.wt for 3days and inj. meloxicam @ 0.5mg/kg body weight for 2 days. Sutures were removed on 10<sup>th</sup> postoperative day and the bird made an uneventful recovery. Benoit, 1937 stated that the comb act as a thermoregulatory organ and it is not entirely useless; Lack of adequate nutrition, dehydration and genetics were the reasons for droopy comb and this is in agreement with our study that the bird was presented with overgrown with drooping of comb onto the one-side. Moreover overgrown comb affects the breeding performance of male. However, dubbing will improve the fertility because male spend less time recovering from superficial head injuries. And also eliminates the possibility of injury from fighting among males (Skinner, 1961).

## References

1. Nakano, T and Sim, J.S. (2001),  
Glycosaminoglycans from the rooster  
comb and wattle.
2. Benoit. J. (1937). External and internal  
factors of sexual maturity. Study of the  
mechanism of light mechanism of  
testicular activity in the domestic duck.  
Bull. Biology. France and Belgium  
71:393-341.
3. Mukhtar, N. and Khan, S.H. (2012).  
Comb: An important reliable visible  
ornamental trait for selection in  
chickens. World's Poultry Science  
Journal, 68(3): 425-434.
4. Skinner, J. (1961). "EC61-1419 Should  
I Dub my Flock?". Historical Materials  
from University of Nebraska-Lincoln  
Extension. 35-43.

