

Dept. of Pathology and Clinical Pathology,
Fac. Vet. Med., Assiut Univ., Assiut Egypt.
Head of Dept. Prof. Dr. M.I. El-Sherry.

PAPILLOMA IN NILE CATFISH (CLARIAS LAZERA)

(With 4 Fig.)

By

S.H. AFIFI and SH.M. AHMED*

(Received at 11/4/1994)

سرطان النسيج الطلائي الجهد في أسماك القراميط النيلية

صلاح عفيفي ، شعبان أحمد

لوحظ سرطان النسيج الطلائي في فم سمكة من أسماك القراميط النيلية وكان هذا النمو في حدود ١ - ٢ سم في القطر .
وقد لوحظ هذا السرطان بعد فترة حوالى ٦ شهور من أحضارها من ترعة الابراهيميه بأسسيوط .
تم التعرف على هذا النمو بالميكروب الضوئى وتفرقته من أنواع النمو المختلفه .

*: Dept. of Medicine and Infectious diseases.

CASE REPORT

One mature Nile catfish (*Clarias lazera*) of an average weight of 250 g and 30 cm in length was caught from the Ibrahemia tributary at Assiut and kept in aquarium under laboratory conditions. This fish had a lentil sized growth in the mouth region. Six months later, a cauliflower growth of 1-2 cm in diameter was observed in both sides of the oral cavity just beneath the barbels.

Selected samples of the growth were taken, fixed immediately in 10% neutral buffered formalin, embedded in paraffin, sectioned at 4-6 μ , and stained with routine haematoxylin and eosin.

Fig. 1 showed a whitish-grey mass of an average diameter of 1-2cm from both sides of the oral cavity and there were no other obvious changes in internal organs, except a whitish foci in the ovary.

Histopathologically, highly thickened epidermis in the form of several finger-like broad projections were observed (Fig.2). These papillary projections were supported by a highly vascularized myxomatous connective tissue core ((Fig.3). A chronic inflammatory cellular reactions made of lymphocytes and few macrophages were superimposed in the connective tissue core. The epithelial cells were hyperplastic and there was no evidence for the presence of inclusion bodies. There was a gradual decrease in the number and deformity in the shape of the alarm substance cells of the epidermis up to total disappearance of these cells in the folds (Fig. 4).

Papillomas have been reported to affect a wide variety of freshwater fishes, such as eels, channel catfish, pike in brackish water (ROBERTS, 198). Several possible causes have been noted in association with these outbreaks of skin tumours. These include external parasites, virus-like particles and a polluted environment, but their relation to the aetiology of the tumours is unknown (ROBERTS, 198). Local lymphoid cell infiltration suggests an irritant effect of the tumour cells, or possibly an immune response of the host (ITO *et al.*, 1976; PHILLIPS *et al.*, 1976). In this report, there was no evidence for the presence of any inclusion bodies, which may suggest the absence of a viral aetiology. Hyperplastic epidermal disease can be confused with papilloma (ROBERTS, 1978). However, in this case report the gradual decrease in alarm substance cells and

Keywords: Papilloma, Nile catfish.

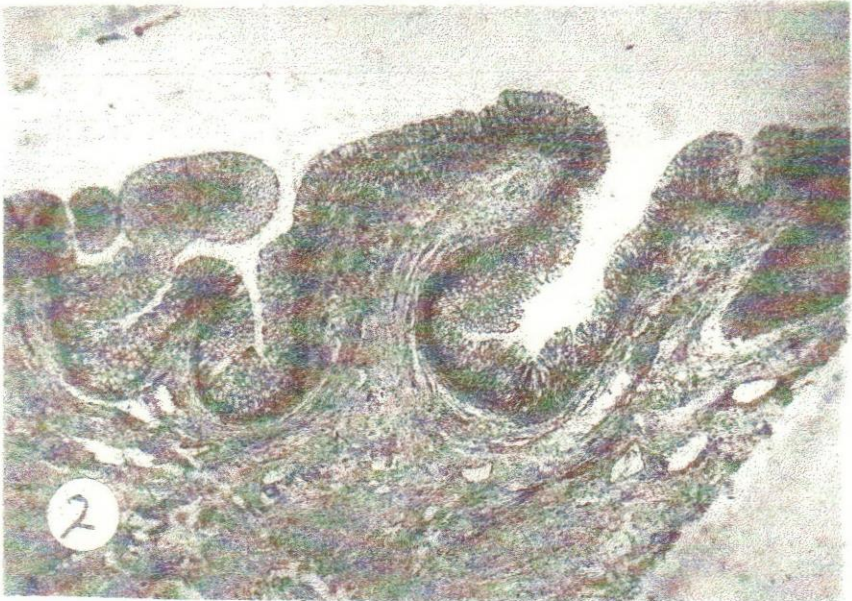
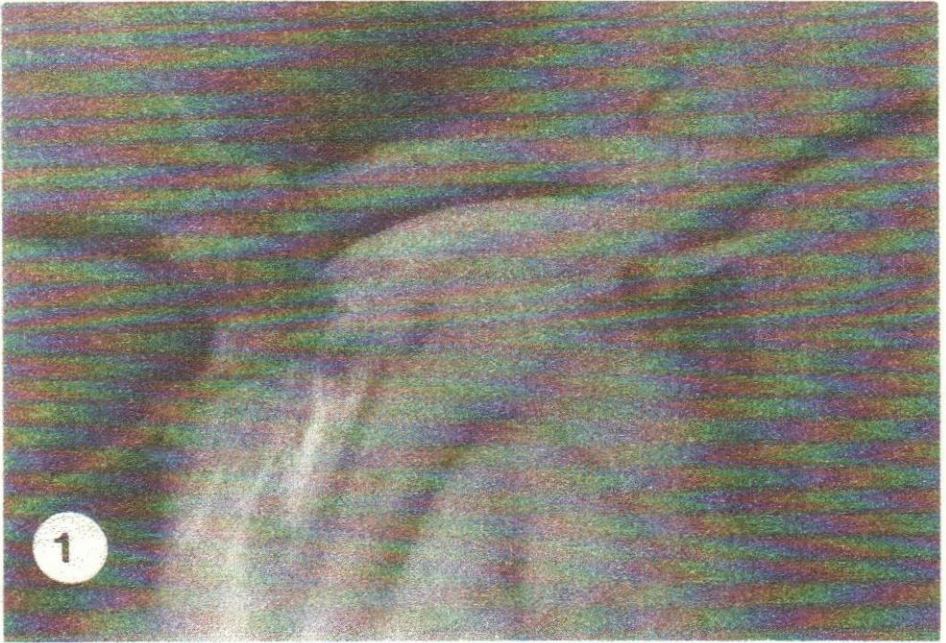
its deformity in shape and the absence of mucus cell from some papillary folds and the highly thickened epidermis may suggest a papillomatous growth rather than a hyperplastic.

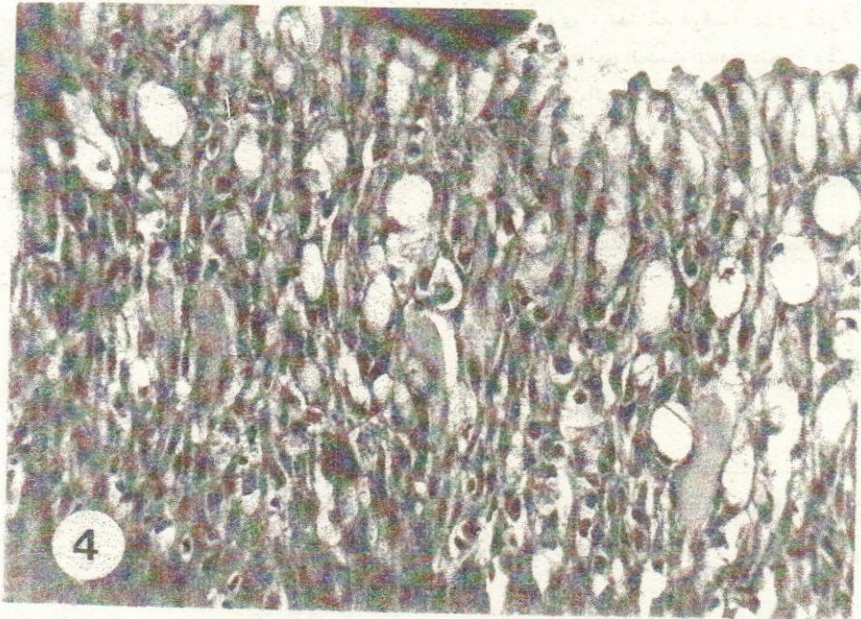
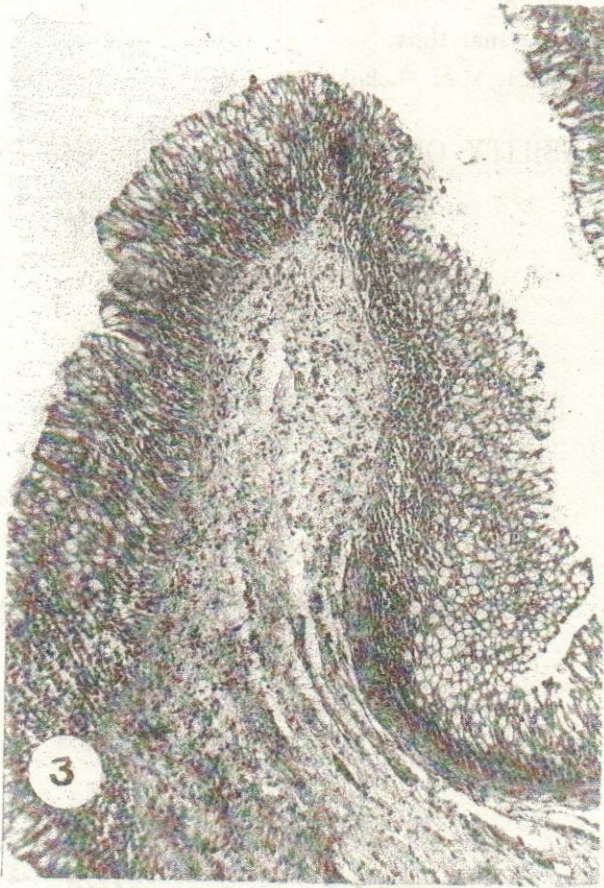
FIGURE LEGENDS

- Fig. 1: Gross appearance of the mass at the corner of the mouth Cavity of *Clarias lazera*.
- Fig. 2: Section of the growth revealed several finger-like projections. H&E x 56.
- Fig. 3: Papillary folds supported by a vascularized myxomatous connective tissue core with inflammatory cellular reaction. H&E x 140.
- Fig. 4: Deformity in the shape of alarm substance cells (a) in the hyperplastic epidermis. H&E x 560.

REFERENCES

- Ito, Y.; Kimura, I. and Miyaka, T. (1976): Histopathological and virological investigations of papillomas in soles and Res., 20, 86-93.
- Phillips, M.L.; Warner, N.E. and Puffer, H.W. (1976): Oral papilloma in *Genyonemus lineatus* (white croakers). Etiological considerations. prog. exp. Tumour Res. 20, 108-112.
- Roberts, R.J. (1976): Neoplasia of Teleosts. In: Fish pathology, (ed. by Roberts, R.J.) 1st edn, pp. 106-108. Bailliere Tindall, LONDON.





VIABILITY OF BRUCELLA MELITENSIS IN DAMIETTA CHEESE

(With 2 Tables)

By

E.H. ABDEL-HAKIEM; M.E. HAMDY*
and M.A. SHELAIH

(Received at 6/2/1994)

مدى قدرة ميكروب البروسيلة ملينسيس على المعيشة في الجبن الدمياطى

امام عبد الحكيم ، محمود حمدي

محمد شليح

تزايدت فى الاونه الأخيره زيادة معدلات الاصابه بمرض الحمى المتموجه بين الادميين ، ونظراً لان الالبان الخام ومنتجاتها تمثل دوراً هاماً فى نقل العدوى ، لذا تم دراسة مدى قدرة العترة الحقلية الثالثه من ميكروب البروسيلة ملينسيس على المعيشة فى الجبن الدمياطى . وقد اظهرت النتائج ان الميكروب استمر حياً لمدة ١٥ ر ١٥ ر ٨ يوماً فى الجبن الدمياطى المضاف اليه ٥ % ، ٧٥ % ، ١٠ % ملح الطعام على التوالي والذى تم حفظه عند درجة حرارة الغرفة (٢٢م) . بينما ظل الميكروب حياً لمدة ٢٥ ر ٢٥ ر ٢٢ يوماً فى انواع الجبن الدمياطى الثالثه على التوالي الذى تم حفظه عند درجة حرارة الثلج (٤م) .

وقد نوقشت خطورة الميكروب على الصحة العامه وكذلك الاشتراطات الصحيه الواجب مراعاتها فى انتاج الالبان وتصنيعها .

*: Dept. of Brucellosis, Animal Health Research Institut, Giza, Dokki.