

# 福壽魚胸腺淋巴肉瘤之病例報告

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## A Spontaneous Thymic Lymphosarcoma in a Hybrid Tilapia

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### Abstract

A case of neoplasm in a hybride tilapia (*Tilapia mossambica* X *Tilapia nilotica*) was found in a cultured pond of Lu-Kang Branch station of Taiwan Fisheries Reserch Institute in September, 1978. The neoplastic mass protruded from left dorsal commissure of the operculum.

Histopathologically, the tumour indicated proliferating and reproducing lymphocytes, endothelial network and fibers. The neoplastic lymphocytes containing vesicle in nucleus were occasionally observed and Hassall's corpuscle commonly appeared. A few bundles of striated musculature and one kind of giant cells were examined. Some part of victim was still deposited in the laboratory.

This neoplasm was identified to be thymic lymphosarcoma.

### 病理學檢查

#### 1. 肉眼檢查

病魚體長39cm，體高14cm，重1.03kg，為3年魚。腫瘤生於病魚左鰓蓋內側上方，呈橢圓形，長徑約4cm，短徑約2cm。腫瘤表面不平呈起伏，有出血斑，顏色為白色，外被薄膜。腫瘤切面呈白色，肉質。病魚其他器官未發現腫瘤塊。

#### 2. 組織病理檢查

腫瘤病材經福馬林及波恩液固定後，以石臘包埋，切成6 $\mu$ 之薄片，以蘇木紫伊紅染色鏡檢，並依不同的目的，以PAS, Azan, Van Gieson, Berlin blue 及 Giemsa 染色。

福壽魚之正常胸腺是由許多中型及小型淋巴球組成 (Fig. 4)，但腫瘤則由許多小淋巴球及大量纖維組成，小淋巴球分佈成小葉狀 (Fig. 2)，在纖維組織的中心部份較疏，周邊部份較密 (Fig. 3)。在高倍鏡檢小淋巴球細胞核有濃染者或核質呈中空者，細胞質均淡染 (Fig. 5)。哈氏體周圍有小淋巴球包圍 (Fig. 6)，在基質內可見小束或單束橫紋肌 (Fig. 7)。

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## 討 論

魚類淋巴肉瘤多原發於皮下組織而後轉移於其他器官<sup>(2,4)</sup>，原發於胸腺者極少。本病例腫瘤生於鰓蓋的背縫合處，鏡檢為淋巴組織，並有哈氏體的出現，故筆者等診斷為胸腺淋巴肉瘤。

## 摘 要

魚類淋巴肉瘤之病例僅限於數種魚種<sup>(1,2,3,4)</sup>，其中以某特定地區的 *Esox* 屬魚類最容易發生。臺灣尚無病例報告。1979年9月筆者等從臺灣省水產試驗所鹿港分所飼養的福壽魚中獲得罹患腫瘤病魚一尾（如圖1），經病理學觀察診斷為胸腺淋巴肉瘤。茲將該病例提出報告，以供參考。

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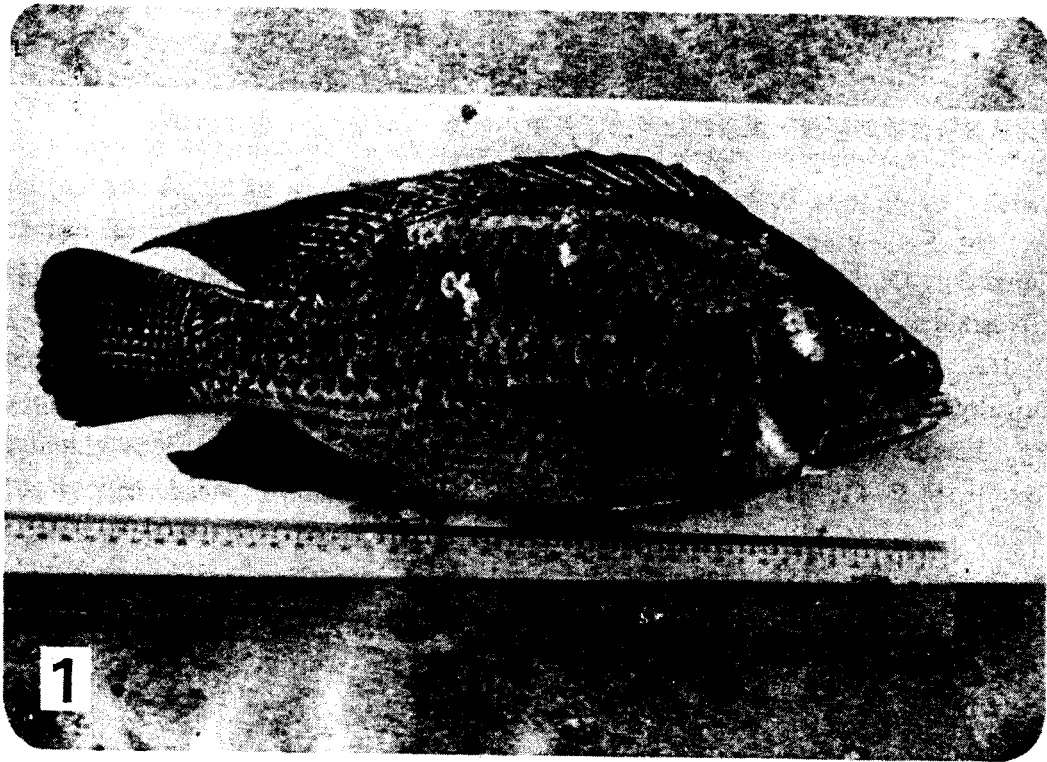


Fig. 1. Thymic lymphosarcoma in a hybride tilapia. 1/4X.



Fig. 2. Lymphocytes densely growing in lobule and no direction proliferating fibrous are observed in tumour. H-E stain, X 100.



Fig. 5. Much of vacant nucleoplasm lymphocytes and hyperchromatic lymphocytes are observed. Hassall's corpuscle commonly appeared in lobule stroma of tumour. One kind of giant cell at the upper part (arrow indicated). H-E stain X 400.



Fig. 3. Waves like distributing in neoplastic lymphocytes and fibrous are seen. H-E stain, X 100.



Fig. 6. Hassall's corpuscle marginal with proliferating lymphocytes in lobule stroma of tumour are observed. H-E stain, X 1000.

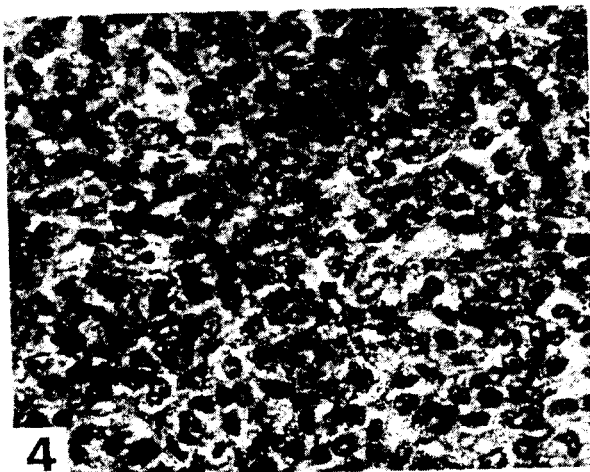


Fig. 4. Median size lymphocytes and small size lymphocytes in control thymus. H-E stain, X 100.



Fig. 7. Striated musculature commonly appearing in neoplastic stroma. Azan stain, X 200.