Cytology from a dermal mass in a pet gold fish (Carassius auratus)

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Specimen: Fine-needle aspirate cytology of a dermal mass

Signalment: 6-year, unknown sex, gold fish (*Carassius auratus*)

History:

An approx. 6-year-old gold fish was presented for investigation of a large dermal mass on the left side. The fish was owned for two years after it was bought from fish nursery and a small dermal mass was noted shortly after purchase but did not seem to affect the fish. Initially the owner had treated this with a tea tree-based treatment into water. The mass had since gradually increased in size and recently a mark had appeared on the mass and additional masses had developed. He was reported anorexic on the day of presentation.

Clinical findings

The fish was bright, alert and responsive on clinical exam and was swimming appropriately. A 50x50mm pedunculated, soft (jelly-like), lobulated, pink-orange mass on left dorsal-lateral flank. Multiple 5x5mm lobulated, pink-orange nodules located around the body and base of the tail. An exophthalmos of the right eye was also noted.



Fig. 1: Dermal mass on the left flank of a gold fish.

Fine-needle aspirates (FNA) of the largest mass were taken with and without negative pressure. The mass was subsequently surgically removed, and both samples were submitted to the diagnostic services of the RVC.

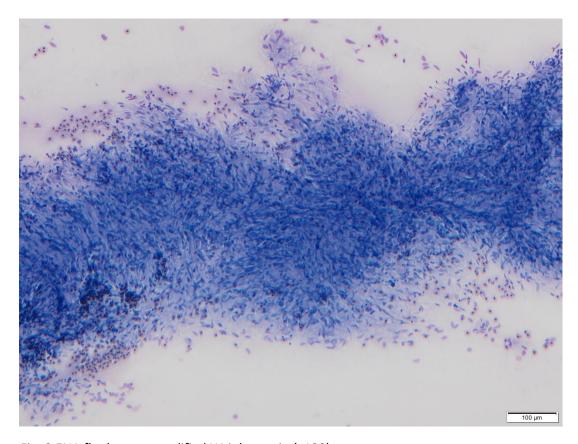


Fig. 2 FNA flank mass, modified Wrights stain (x100)

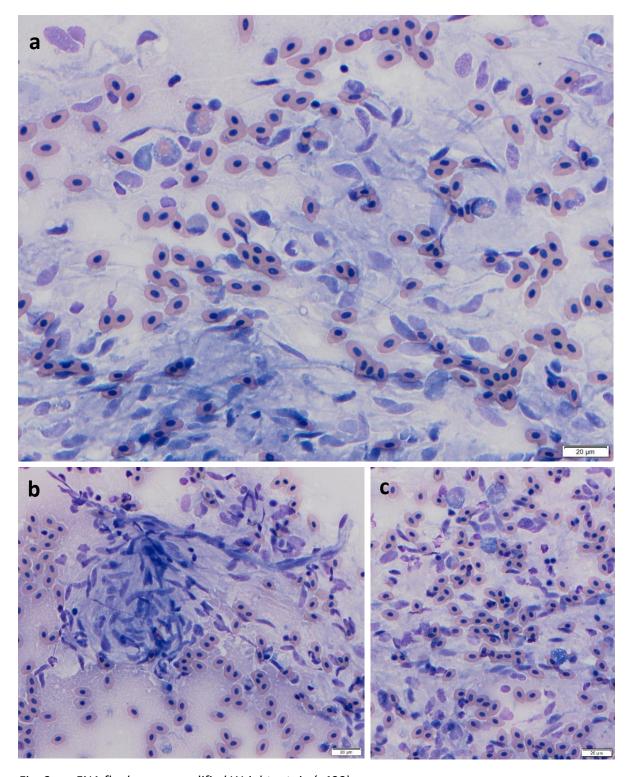


Fig. 3 a-c FNA flank mass, modified Wrights stain (x400)

Questions

- 1. Describe the cytological findings?
- 2. What is the most common skin neoplasia in fish?
- 3. What is your top differential for this case?