ASVP DIAGNOSTIC EXERCISE NO. 20 Roger Kelly

History: A 7 year-old Thoroughbred stallion was castrated in the field, apparently without complications, but was represented a month or so later with signs of scirrhous cord. A mass "like a 3rd testicle" was removed from the surgical site (figure 1), together with an enlarged inguinal lymph node (sectioned; figure 2). There was also a mass palpable *per rectum* in the left posterior abdominal guadrant.

- 1. Describe the abnormalities.
- 2. What basic disease processes might be present?
- 3. Pathological diagnosis (give other possibilities in order of preference)?
- 4. Suggest possible cause/s.

Description:

The larger specimen, a sectioned spheroidal mass about 7cm in diameter, appears to be lightly encapsulated and presents a brawny variegated cut surface that has a semiconfluent nodular appearance; raised pale greenish nodules alternating with sunken darker intervening zones. The lymph node may be enlarged (no scale) and its cut surface has pale semiconfluent nodules bulging from it.

Basic disease process/es:

The masses seem to consist of viable tissue that has been added to the area, so neoplasia must be a possibility. Neoplasia, if present, would have to be malignant to have infiltrated local lymph nodes. Alternatively, tissue masses may be produced by chronic proliferative inflammation. Heavy fibrous encapsulation favours the latter interpretation.

Pathological diagnosis:

Either locally metastatic malignant neoplasia with local lymph node metastasis, or chronic granulomatous scirrhous cord with associated chronic granulomatous lymphadenitis.

Possible cause/s:

If this is neoplastic, one would assume coincidental occurrence of neoplasia following castration with no necessary association, or perhaps some exacerbation by the latter of the former. If this is an inflammatory response, there may have been introduction of a pathogen or soil saprophyte at castration; obviously the possibilities are broad.

Laboratory follow-up:

Neoplasia was tentatively diagnosed on the gross specimen and rapid histological processing was requested. Fortunately most of the specimen was retained in the chiller, and after granulomatous inflammation associated with larval nematodes was found in the section, the chilled material could be submitted to the parasitologist (Dr Alan Waddell), who retrieved *Halicephalobus* (formerly *Micronema*) *deletrix* larvae from it.

Comment:

H. deletrix infections of horses more often cause encephalitis, although there are reports of orchitis. See AFIP Wednesday Slide Conference - No. 12 September 1998 - for cases and review: http://www.afip.org/vetpath/WSC/wsc98/98wsc01.htm

Please contact me rkelly9@optusnet.com.au if you want to discuss any aspect of this case.