ASVP DIAGNOSTIC EXERCISE NO. 30 Roger Kelly

History:
Incidental finding in a mature mongrel *ex* local pound; necropsy dissection class. No history.

1. Describe the abnormalities.

2. What basic disease process/es might be present?

3. Pathological diagnosis (give other possibilities in order of preference)?

4. Suggest possible cause/s.

Description:
One pole of speen (presumably the ventral end). The parietal surface is finely wrinkled and is elevated by a dozen or so small smooth-surfaced dark red nodules up to about 4mm diameter. These are apparently randomly distributed but are more frequent along the splenic margins.

Interpretation:
Nodular swellings usually indicate either chronic inflammatory infiltrates or neoplastic proliferations. However, extravasations of blood (haematomas) can also produce swellings, and in the spleen spontaneous accumulations of blood have always to be borne in mind.

Preferred morphological diagnosis:
Splenic haematomas

Differential:
Vascular neoplasia (haemangioma /-sarcoma): these are usually larger and in early stages would be more likely to be single, unless haematogenously metastatic from a primary site.

Splenic infarction is also more likely to affect the borders of the organ, but is more commonly associated with serious valvular endocarditis, with infarcts in kidney and other organs

You might reasonably expect local nodular splenitis to be accompanied by various combinations of scarring (adhesions), pus accumulation or hyperaemia and/or fibrin deposition.

Possible cause:
Unknown. Possibly the peculiar and somewhat undisciplined nature of the splenic microcirculation results in pockets of blood failing to be re-infused into the circulation when an engorged spleen contracts during its normal functional cycle. Whether or not this can be classed as true haematoma formation is a moot point.

Comment:
These small stagnant accumulations of blood eventually become partially resorbed, degraded and sometimes partly mineralised, leaving grayish nodules and plaques (so-called siderotic plaques, or Gamna-Gandy bodies) which are quite common around the distal margins of the spleen of older dogs (fig.2).

These splenic changes used to be mere academic curiosities in the life of diagnostic veterinary pathologists, but with clinical ultrasound devices now able to detect quite small changes in the spleen, biopsy sampling of these lesions has increased and has necessitated their explanation to diagnostically desperate clinicians.

If anyone wishes to provide a diagnostic case, please contact me (mailto:roger-kelly@aapt.net.au) if you need advice about image requirements.