Ovary – Metaplasia, Osseous

Figure Legend: Figure 1 Ovary - Metaplasia, Osseous in a female B6C3F1/N mouse from a chronic study. An area of osteoid is present in the ovarian parenchyma. Figure 2 Ovary - Metaplasia, Osseous in a female B6C3F1/N mouse from a chronic study (higher magnification of Figure 1). There is an area of osteoid with foci of mineralization.

Comment: Ovarian osseous metaplasia (Figure 1 and Figure 2) is characterized by a well-circumscribed, unencapsulated focus composed of bony trabeculae lined by osteoblasts and osteoclasts; there may also be clumps of amorphous acellular basophilic material, which are most likely mineralized deposits of calcium salts, and mild compression of adjacent ovarian parenchyma. Ovarian metaplasia is a change associated with aging and ovarian atrophy. Osseous metaplasia has been occasionally reported, but the mechanism has not been elucidated.

Recommendation: Ovary - Metaplasia, Osseous should be diagnosed and graded whenever present.

References:

National Toxicology Program. 1997. NTP TR-450. Toxicology and Carcinogenesis Studies of Tetrafluoroethylene (CAS No. 116-14-3) in F344 Rats and B6C3F1 Mice (Inhalation Studies). NTP, Research Triangle Park, NC.
Abstract: http://ntp.niehs.nih.gov/go/6044
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References:

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