Figure Legend: Figure 1 Pituitary, Rathke’s cleft - Dilation in a female F344/N rat from a chronic study. The dilated Rathke’s cleft is filled with intensely eosinophilic proteinaceous material with cholesterol clefts (arrow) present at the edge of the dilated cleft. Figure 2 Pituitary, Rathke’s cleft - Dilation in a female F344/N rat from a chronic study. Higher magnification of Figure 1 shows the dilated Rathke’s cleft filled with intensely eosinophilic proteinaceous material and the cholesterol clefts (arrow) at the edge of the dilated cleft in greater detail. Figure 3 Pituitary, Rathke’s cleft - Dilation in a female F344/N rat from a chronic study. The dilated Rathke’s cleft contains pale eosinophilic proteinaceous material and erythrocytes (hemorrhage).
Comment: Dilated persistent Rathke’s clefts are relatively common in rats and typically contain eosinophilic colloid-like proteinaceous material. Cholesterol clefts (arrow, Figure 1 and Figure 2), as well as free erythrocytes (Figure 3), may be present. Pituitary cysts may also be present (see Pituitary Gland - Cyst).

Recommendation: Since chronic studies may incorporate in utero exposure, developmental alterations potentially related to treatment could influence the ultimate presence and appearance of Rathke’s cleft. Thus, this change should be documented when present. A severity grade is appropriate if there is a potential treatment-related effect on the occurrence or severity of this change. Hemorrhage or cholesterol clefts within the dilated Rathke’s cleft should not be diagnosed separately unless warranted by severity.

References:


Pituitary Gland, Rathke’s cleft – Dilation

References:


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