

〔原 著〕

骨生長異常による WHHLMI ウサギの斜頸

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Relation of Cranial Abnormal Growth to Torticollis in
WHHLMI Rabbits

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Summary Some rabbits showed torticollis in our WHHLMI colony, although these rabbits did not show any signs of infectious diseases. Therefore, we examined the cause of torticollis in our rabbit colony. In 404 rabbits aged above 5 months old born from 2001 to 2005, we examined findings of external appearance, serum lipid levels and breeding, and the shape of the skull morphometrically in 82 rabbits aged above 7 months old. Frequency of rabbits showing torticollis was 13.1% (53/404) and that in males (20.6%, 43/209) was significantly high compared to females (5.1%, 10/195). Serum lipid levels did not relate to torticollis. The difference in the length from nasal apex to external acoustic meatus between right and left side in torticollis rabbits (n=31) was significantly larger than that of normal rabbits (n=51). In addition, the length from the external acoustic meatus to the base line of mandible also showed significant difference. Every rabbits did not show suppurative exudate in

the tympanic bulla. The frequency of torticollis in rabbits whose parents or grandparents were normal (4.8%, 2/42) was 30% lower than the frequency in rabbits whose either parents showed torticollis (34.9%, 22/63). In addition, the frequency of torticollis rabbits was decreased markedly by using WHHLMI rabbits showing normal appearance in breeding. In conclusion, these results suggest that torticollis observed in WHHLMI rabbits related to difference in growth of cranium between the right and left side but not to hyperlipidemia and infectious diseases. In addition, some genetic factors may relate to torticollis in WHHLMI rabbits.

Key words: torticollis, morphometry, cranium, mandible, WHHLMI rabbit

要 約

我々の施設で維持している遺伝的に心筋梗塞を自然発症するWHHLMIウサギで感染症によるとは思われない斜頸を散発的に観察した。頭部の計測、あるいは頭蓋、下顎骨を計測した結果、斜頸ウサギは正常ウサギに比較して、鼻尖から外耳孔中心の距離および下顎骨基底線から外耳孔中心の高さで有意な左右差を認めた。また、外耳孔中心から外頭骨隆起点の距離、頬骨部前後内径、下顎長等、頭蓋骨および下顎骨で左右のアンバランスが認められ、斜頸側の耳孔は反斜頸側より前方寄りのやや下方で水平方向に開口していた。これらの斜頸は血清脂質値との関連はなく、遺伝的要因が示唆された。現在我々の施設では、斜頸ウサギを種親として使用しないことで斜頸ウサギが激減した。

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