

2001년 3월부터 10월까지 서울시 관내에 사육되고 있는 비육견 189두, 애완견 117두에 대해 총 306두의 혈액을 채취하여 혈청을 분리하고 Rabies virus(ERA stain) 백신주와 BGK(Black Goat Kidney) cell을 배양하여 효소면역중화시험법(NPLA, Neutralizing Peroxidase-Linked Assay)으로 항체 분포를 조사한 결과 다음과 같았다.

1. 서울시 사육견의 광견병 항체 분포는 전체 306두 중 74두(24.2%)가 항체양성률을 보였다. 북한산 국립공원 인접구의 개 211두 중 50(23.7%), 기타구 95두 중 24(25.2%)가 양성으로 나타났으며 지역별 항체양성률의 차이는 없었다.

2. 사육용도별 항체 분포는 애완견 117두 중 47두(40.2%), 비육견 189두 중 27두(14.3%)가 양성이었으며, 사람에게 사랑을 받는 애완견이 비육견보다 항체 양성률이 높은 것으로 나타났다.

3. 연령별 항체 분포는 1세 미만 55두 중 8두(14.5%), 1세 이상~2세미만 98두 중 22(22.4%), 2세 이상~3세미만 46두 중 15(32.6%), 3세 이상~5세미만 72두 중 21(29.2%), 5세 이상 33두 중 8두(24.2%)가 양성으로 특히, 1세미만에서 항체보유율(14.5%)이 현저하게 낮은 것을 볼 수 있었다.

9. Apoptosis in experimentally infected chicks with Avian infectious bronchitis

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This experiment was performed to investigate apoptosis during undergoing pathogenesis of avian infectious bronchitis virus (IBV)-infected chicks. 16 days old chicks were infected with IBV, Massachusetts-41 strain (M-41, $10^4 \sim 10^5$ EID₅₀) experimentally, they were autopsied to remove trachea, lung, kidney and cloacal bursa at 6, 12hr, 1, 3 and 7 days post infection (PI) respectively for H-E and TUNEL staining. The results were obtained as follows ;

1. Grossly, mild serous, catarrhal exudate was observed in the trachea, nasal passages and sinuses nasal from 4 day PI. The cloacal bursa was swollen from 3 day PI.

2. Histopathologically, the trachea was seen mild cellular infiltration, edema of the mucosa and submucosa, vascular congestion and mild hyperplasia of the epithelium from 6h PI and the changes were seen a little more severely on 7 day PI. It was observed that the cloacal bursa was getting more and more hyperplasia through the experiment. The nuclei degeneration were shown in the kidney on 7 day PI. No specific changes were seen in the lung.

3. In TUNEL analysis, apoptotic cells showed sharp increasing at 12h PI and reaching a maximum on 1day PI in the trachea, lung, kidney and cloacal bursa. And then apoptotic cells decreased gradually returning to a level of the control by 7 day PI in all the removed organs.