OMICS Group Conferences
Accelerating Scientific Discovery

International Conference on
Animal & Dairy Sciences

July 23-24, 2013   Embassy Suites Las Vegas, NV, USA

The expression pattern of retinoblatoma protein in canine mammary tumor: A perspective study

Dnyaneshwar Gavhane, Amarjit Singh and Sagar Jadhav
Bombay Veterinary College, India

The retinoblastoma gene (RB) is a well known tumor-suppressor gene. Inactivation of RB has been shown in a variety of human cancers but its role in Veterinary Oncology is still unclear. As canine mammary tumor is one of the models for human breast cancer, we analysed the expression of the retinoblastoma (RB) gene in 31 canine mammary carcinomas and in a variety of its benign lesions. Among the 31 cases analysed; 2 were of simple carcinoma, 14 of complex carcinoma, 13 of carcinosarcoma and 2 of sarcoma. Expression of RB was assessed in all samples by immunohistochemical technique. The results of our study revealed the immunolocalisation of RB to the basal cell layer and were predominantly nulear. The expression was also high in benign lesions like ductal, lobular hyperplasia as well as atypical hyperplasia. The loss of RB was noticed as the cell becomes neoplastic, malignant and invasive although none of the tumor was totally negative. As the tumor advanced, the expression of RB gene was lost in 60-90% cells of 28 cases of canine mammary tumour. Thus, findings of our study uncover the importance of retinoblastoma gene (RB), the loss of which leads to uncontrolled cell division, tumor progression and may indicate poor prognosis.

Biography

Dnyaneshwar Gavhane has completed his BVSC & AH degree from Maharashtra Animal and Fishery Sciences University, Nagpur, India. He got selected by Indian Council of Agricultural Research for post graduation studies in the subject Veterinary Pathology at Guru Angad Dev Veterinary and Fishery Sciences University, Ludhiana, India in the year 2009. Currently he is doing his Ph.D. at Bombay Veterinary College, Mumbai, India. He has attended various National, International conferences and delivered seminars and has presented the posters.

mmaulivet@gmail.com

J Veterinar Sci Technolo 2013
ISSN: 2157-7579, JVST an open access journal

Animal Science-2013
July 23-24, 2013

Volume 4 Issue 4

Page 99