

Abstract

Pneumonia is inflammation of respiratory system which can be caused by bacteria, viruses, fungi and even non-infectious factors. This disease has significant economic impact for dairy and fattening sheep herds due to reduction in production, weight loss and increasing mortality rates. This study was conducted to determine the macroscopic, histopathological and molecular lung lesions of pasteurellosis and mycoplasmosis in slaughtered sheep in Fariman industrial slaughterhouse. For this purpose a total of 4960 lungs were collected from sheep slaughtered at Fariman abattoir during 2015-2016. From these, 90 lungs macroscopic suspected to pneumonia were examined microscopically and PCR was carried out for molecular detection of *pasteurella multocida* and *mycoplasma ovipneumonia*. Furthermore, statistical analysis was performed using chi square. The data were analyzed by SPSS version 18 software. Molecular analysis showed 16 specimens (17/77 percent) were positive for *pasteurella multocida*, but *mycoplasma ovipneumonia* was negative in all specimens. In histopathological investigation the most common lesions were bronchopneumonia (17/58 percent) and purulent pneumonia (14/28 percent). In addition, there was significant relationship between age, sex and season with *pasteurella multocida* ($P<0.05$). In conclusion, it seems necessary to adopt convenient strategies and accurate methods for control, prevention and eradication of pasteurellosis.

Keywords: Histopathology- PCR- Lung-Pasteurella-Mycoplasma



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**Macroscopic, histopathological and molecular survey of lung
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Fariman abattoir abattoir**

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