Abattoir based study on Prevalence, Bacterial Etiology and Histopathological Structure of Abscess in Slaughtered Goats, Rasht

Shahram Mehdizadegan*,

Liver abscess is a worldwide contagious bacterial disease of sheep and goats and is adversely affecting the development of the sheep and goat industry in Iran. The aim of this research was to determine frequency, bacterial agents and histopathological structure of hepatic abscesses in local breed of goats slaughtered at Rasht abattoir, Iran. Post-mortem examination of 1187 goats including 673 male and 514 female, showed that 6 goats including 3 (50%) male and 3 (50 %) female exhibited liver abscesses. Abscesses were found on diaphragmatic surface (0/50%), visceral surface (33/3 %) and both lobes (16/5%) of the livers. Regarding the presence of abscesses, there was no significant difference between sexes, lobes and surfaces of livers (p>0.005). Isolates were identified as follows: Corynebacterium pseudotuberculosis, Arcanobacterium pyogenes, Fusobacterium necrophorum,Escherichia coli, Pseudomonasspp, and Streptococcus spp. This study revealed that Corynebacterium pseudotuberculosis (33/33%) andArcanobacterium. pyogenes (33/33%) were the most important isolates of liver abscesses and F. necrophorumis the second important isolate of liver abscesses (16/6%%) in goats of Rasht district. Histologically, these lesions had a core of caseous necrosis, encircled by a zone of necrotic phagocytic cells and bacteria with cellular characteristics of Corynebacterium pseudotuberculosis and a connective tissue capsule with calcification. Our study suggested that Corynebacterium pseudotuberculosis is the most prevalent bacterium incriminated for hepatic abscesses in goat.

Keywords : slaughterhouse, goat, hepatic abscess, Rasht