THE BACTERIOLOGIC STUDY OF HEPATIC ABSCESS IN SLAUGHTERED CATTLE IN SHAHREKORD ABATTOIR (IRAN)

S.Lotfollahzadeh1, A.R.Abodol2, A.Sharifzadeh3, M.R.Mokhber Dezfoli4, P.Tajik4
1-Department of clinical sciences, Faculty of veterinary medicine, Azad university of Garmsar, Garmsar, Iran, 2-Graduated from Faculty of veterinary medicine, Azad university of Shahrekord, Shahrekord, Iran, 3–Department of pathobiology, Faculty of veterinary medicine, Azad university of Shahrekord, Shahrekord, Iran, 4- Department of clinical sciences, Faculty of veterinary medicine, Tehran university, Tehran, Iran

Introduction
Local suppurative infections of the liver (hepatic abscess) do not cause clinical signs of hepatic dysfunction, unless they are particularly massive or extensive metastatic. Many bacterial causes have been isolated from bovine liver abscesses. Liver abscesses occur at all ages and in any species, but the abscesses of significant economic impact occur in feedlot cattle (1, 2, 3, 7, 9). This study was carried out to find the occurrence and bacterial causes of hepatic abscesses in slaughtered cattle in Shahrekord abattoir.

Material and Methods
During June to September 2003 five hundred sacrificed cattle in Shahrekord abattoir were inspected for hepatic abscesses. In the case of hepatic abscess after recording of animals’ sex, age, production and abscess characterizations (number, size, location), whole abscess with some normal liver tissues which adhered to it, was dissected from the liver and transferred to the bacteriology lab. Aerobic, anaerobic and microaerophilic cultures from hepatic abscesses were carried out with standard methods.

In this study 500 sacrificed cattle for hepatic abscess were examined and bacterial culture of 33 abscesses was done.

Results
Thirty three cattle (6.6%) from 500 inspected sacrificed cattle in Shahrekord abattoir were inspected for hepatic abscess. In the case of hepatic abscess after recording of animals’ sex, age, production and abscess characterizations (number, size, location), whole abscess with some normal liver tissues which adhered to it, was dissected from the liver and transferred to the bacteriology lab. Aerobic, anaerobic and microaerophilic cultures from hepatic abscesses were carried out with standard methods.

Discussion
Different studies on the occurrence of bovine hepatic abscesses showed different results (3, 6, 7, 8).

In the present study occurrence of bovine hepatic abscess was 6.6% which is in accordance with other studies. It has been reported that F. necrophorum is the primary etiologic cause of 80 to 97% of bovine hepatic abscess (1, 2, 5). Other bacterial agents such as Actinomyces pyogenes, Streptococcus sp, Staphylococcus sp and Bacteroides were also isolated from liver abscess (1, 2, 6, 7, 8).

In the present research F. necrophorum was isolated from 63.63% of hepatic abscesses of slaughtered cattle and A. pyogenes was isolated from 27.27%.

Conclusion
The results of the present study showed that F. necrophorum is the most important bacterial cause of hepatic abscesses in slaughtered cattle in Sharekord abattoir and A. pyogenes is the second important bacterial cause of hepatic abscesses.

References