一種致命的細菌-鈎端螺旋體

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摘要

鈎端螺旋體(Leptospira),是一種細菌,菌體螺旋緊密雨端帶鈎,長 5-15μm,寬 0.1-0.2 μm,會造成人畜共通感染,被歸類為法定傳染病,嚴重時甚至致命。本實驗將 5 位致死案例,經大體解剖後,取其器官做組織切片,以 HE 染色、鍍銀染色、免疫組織化學染色,之後在顯微鏡下觀察,進一步瞭解其病理組織變化。結果發現,鈎端螺旋體主要造成的病理變化,包括間質性心肌炎、瀰漫性肺出血、大量肝細胞壞死及間質性腎炎。實驗中所使用的鍍銀染色僅可染出「螺旋體」,若要進一步鑑定是那一類螺旋體感染,必需再利用具專一性的鈎端螺旋體抗體以免疫組織化學染色,確診為「鈎端螺旋體」。為避免感染鈎端螺旋體病(Leptospirosis),人們應避免將有傷口的皮膚,長期接觸動物的排泄物及遭污染的土壤和水源。

關鍵字:鈎端螺旋體病、鍍銀染色、免疫組織化學染色

Fatal bacteria – Leptospira

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Abstract

Leptospira are spiral-shaped bacteria that are 5-15μm long and 0.1- 0.2 μm wide. One or both ends of the spirochete are usually hooked. Leptospirosis is a zoonosis, could be fatal if untreated.

Organs were collected by autopsy from five lethal cases. Hematoxylin and Eosin stain was used for histopathological examination. The histopathological findings included interstital myocarditis, diffuse pulmonary hemorrhage, massive liver cell necrosis and interstital nephritis.

We used Warthin-Starry silver stain to identify spirochete. And immunochemistry stain with specific leptospiral antibody was used to show leptospira infection. To avoid leptospirosis, open wound should be kept away from the animal's excreta contaminated soil and water.

Keywords: Leptospirosis, Warthin-Starry silver stain, Immunohistochemistry.