

牛結節疹之鑑別診斷疾病

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摘要

牛結節疹是一種痘病毒疾病，在牛隻中具有高發病率及低死亡率，其造成之經濟損失主要為牛隻營養狀態低下、乳量下降、流產、不孕及皮毛毀損。2020 年 7 月 10 日金門縣爆發了臺灣首例牛結節疹病例，此後，截至同年 8 月底，金門縣牛隻全面完成牛結節疹疫苗接種前，共有 38 個金門縣的牛場被確診為牛結節疹。在 2020 年 8 月至 9 月間，臺灣本島及澎湖縣亦通報了 3 件疑似牛結節疹的病例，這些牛隻全身多處皮膚皆可見大小不一之丘疹、結節、膿疱或斑塊，除皮膚病變外，皆未發現顯著的臨床症狀，且死亡率皆為零，藉由皮膚塗抹片鏡檢、細菌分離、組織病理學檢查、電子顯微鏡檢查及 PCR，這些病例皆被排除牛結節疹病毒感染，並分別被診斷為牛毛嚢蟲症、嗜皮菌症及第二型牛疱疹病毒感染症(假性牛結節疹)。即時及精確的鑑別診斷在牛結節疹疫區國的養牛業中扮演重要角色，可避免因誤診而導致的淘汰和經濟損失。

Differential diagnosis of lumpy skin disease from other bovine diseases

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Abstract

Lumpy skin disease (LSD) is a poxviral disease which can cause significant morbidity but usually results in low mortality rates among infected cattle. The economic losses resulting from bovine LSD outbreaks stem primarily from losses in condition, reductions in milk yield, as well as increases in abortions, cases of infertility, and damaged hides. An outbreak of LSD in Taiwan was first reported in Kinmen County on July 10 2020 and 38 cattle farms were confirmed to have experienced LSD outbreaks by the end of August, 2020, at which time all cattle had been vaccinated with LSDV vaccines in Kinmen County. From August to September 2020, three LSD-suspected cases in cattle from Taiwan and the Penghu Islands were also investigated. These cattle displayed irregularly sized papules, nodules, pustules or plaques that were ubiquitously distributed on the cutis. Outside of the skin lesions, no other significant clinical signs were noted, and no mortality occurred. By using skin impression smears, bacterial culturing, histopathological examinations, electron microscopy, and PCR, LSD was ruled out and the three cases were subsequently diagnosed as bovine demodicosis, dermatophilosis, and pseudo-lumpy skin disease, respectively. The immediate and correct differential diagnosis of LSD plays an important role within the cattle industry of LSD-affected countries, which can avoid culling and other economic losses caused by misdiagnosis.