



Latin Comparative Pathology Group

The Latin Subdivision of the CL Davis Foundation

Diagnostic Exercise

Case #: 22 Month: June Year: 2012

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History:

Tissue collected from a 1 year old steer during slaughter at a meat plant in Southern California and submitted for diagnostic work up.

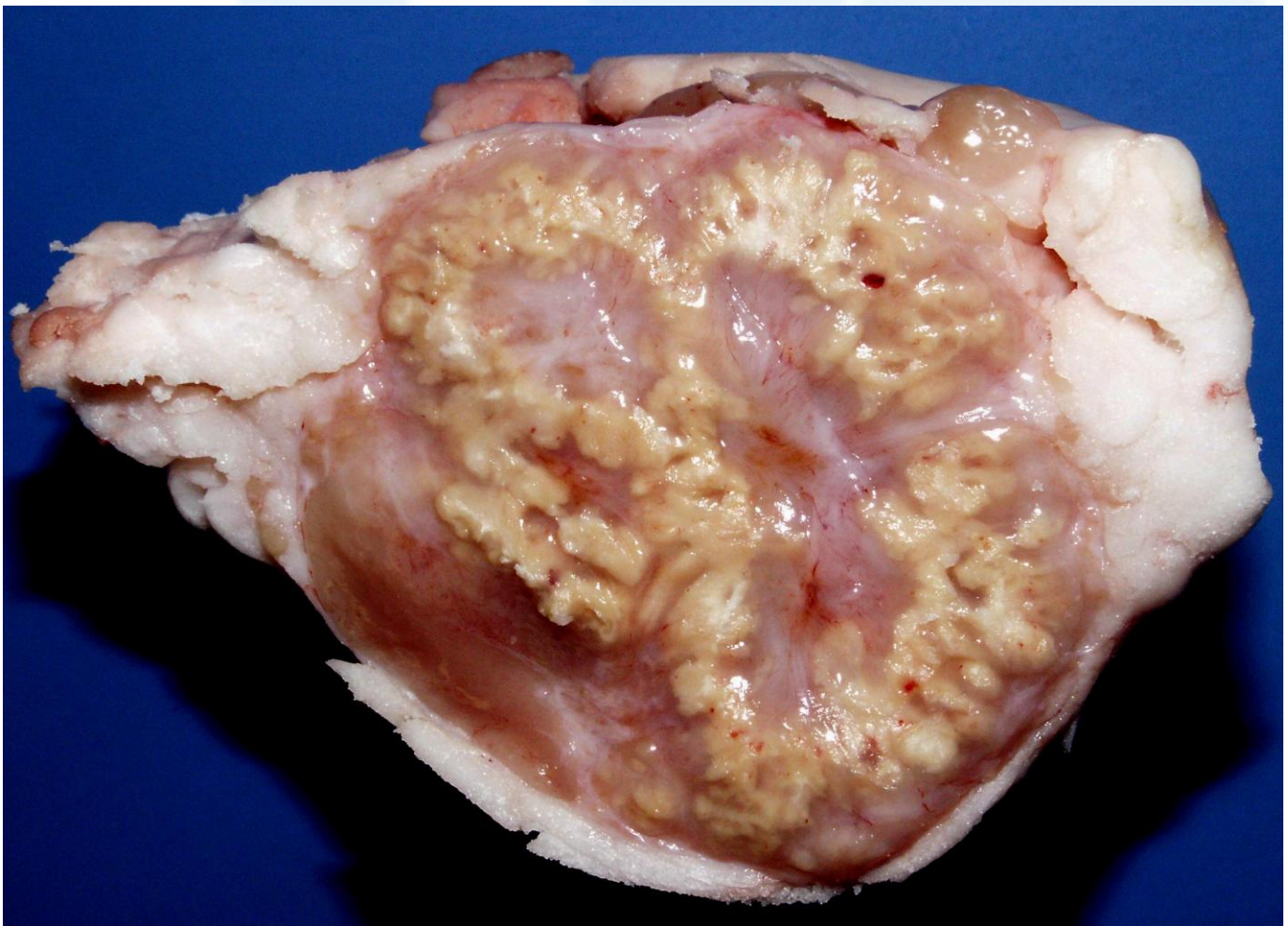


Photo: Dr Joaquin Ortega Porcel

1. Description: lymph node; normal architecture is replaced by multifocal to coalescing and more or less sharply delineated, grayish-white to yellow, areas of caseous necrosis.

2. Morphologic diagnosis: lymphadenitis, granulomatous, multifocal to coalescing

3. Four possible causes: Zygomycetes (*Mortierella spp.*, *Absidia spp.*, *Mucor spp.*, others), *Mycobacterium bovis*, *Actinomyces bovis*, *Actinobacillus ligneresi*, *Nocardia spp.* In this particular case, the lesion was produced by Zygomycetes, probably the most common cause of lymphadenitis in cattle in Southern California. Culturing Zygomycetes from tissue lesions is difficult, and even when Zygomycetes are recovered, identification to species level is time-consuming and may require the expertise of a mycology reference laboratory. Therefore, diagnosis is, as in this case, usually made based on morphology of the fungus as it appears in tissue sections. Grossly, however, the lesion cannot be confidently distinguished from lymphadenitis produced by the other causes of lymphadenitis mentioned above.

Reference: Ortega J, Uzal FA, Walker R, Kinde H, Diab SS, Shahriar F, Pamma R, Eigenheer A, Read DH. 2010. Zygomycotic lymphadenitis in slaughtered feedlot cattle. *Vet Pathol.* 47: 108-15.

Please send your comments/questions to the whole LCPG list by hitting "reply to all".

A final document containing this material with answers and a brief discussion will be posted on the C. L. Davis website by the end of the current month (http://www.cldavis.org/lcpng_english.html).