

Acellular Human Dermal Matrix for Treatment of Wounds with Large Dead Space in 3 Dogs

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Signalment: Jindo (8-year-old, intact female), Golden Retriever (5-year-old, intact male), and Boxer (2-year-old, intact female) were applied acellular human dermal matrix (ADM) for wounds with large dead space those healing were delayed.

Results: The cases were, dead space after total ear canal ablation and lateral bulla osteotomy, left elbow joint skin plasty surgery, and dog bites. It was effective in not only dead space of dermal defect wounds, but also defect wounds between muscular planes. As using ADM, size of dead space and amount of discharge were decreased rapidly. The average time of dead space disappear was 10 days. And complications of xenograft such as immune responses were not found.

Clinical relevance: ADM is produced from fresh human cadaver skin by a controlled process that removes the cells from the dermis without altering the structure of the extracellular matrix and the basement membrane complex. ADM offers a safe, easy to use grafting material which provides benefits over both xenograft and synthetic materials. ADM was effective in delayed healing wounds with large dead space. It made the dead space and discharge decreased without any remarkable complication of xenograft.

Key words: acellular dermal matrix, dead space, xenograft, dog