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## Analysis of Vertebrae Pathologies of Grave A650 Chryssi Island, Crete, Greece

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Analysis of Vertebrae Pathologies of Grave A650 Chryssi Island, Crete, Greece  
Abbey E. Bartmess, Susan Kirkpatrick Smith

This study of multiple, co-mingled adult individuals located in grave A650 on Chryssi Island, Crete, Greece, examines the prevalence of several pathologies of the vertebrae. This grave was built into a collapsed Late Minoan period house (1400-1100 B.C.E.). Grave A650, which likely dates to the 5th – 7th century C.E., shows evidence of being used over a long period of time and may have served as an ossuary. The pathologies of approximately 30 recovered vertebrae, both complete and incomplete, show signs of degenerative joint disease, spondylolisthesis, and body expansion. Researching this data aims to accomplish a comprehensive understanding of what the present pathologies indicate about the physical activity endured by individuals during their lifetime. Conclusions of this data reveal these co-mingled individuals endured intense and sustained physical activity throughout their lives. There were high numbers of degenerative joint diseases in the thoracic vertebrae, which could indicate repetitive movement in bending down. A plausible cause of this intense labor could be slavery, as revealed by accompanying evidence in the ossuary itself.