Case Study of Lower Extremity Fractures
Mercedes Benz CIREN Center at the University of Alabama at Birmingham
Spring CIREN Meeting
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Case vehicle is a 4-door 1998 Honda Civic
Struck vehicle is a 4-door 1998 Dodge Intrepid

V1 (case vehicle) was traveling west at approximately 55 mph on a dry divided roadway in the center of the three westbound lanes. V2 (non-case vehicle) was traveling east on the same roadway in V1's travel lane. The vehicles struck head-on in an offset pattern, left front to left front. V1 continued in a northwest direction and struck a guardrail on the north side of the roadway. V1 came to rest on the north shoulder of the road. V2 continued traveling south, rotating 120 degrees counterclockwise, and came to rest in the center lane. Both vehicles were equipped with driver and passenger airbags that deployed on impact.

Case occupant was a 43 year old female, restrained driver of the 1998 Honda Civic involved in a motor vehicle accident. Paramedics on the scene reported deployment of the driver's airbag. She required an extrication time of 45 minutes and complained of left chest, shoulder, and pelvis pain at the scene. She was transported by ground ambulance to a nearby hospital for initial evaluation. Approximately four hours after injury she was transferred to the trauma center for definitive trauma care. After standard trauma resuscitation and evaluation, the following injuries were identified: Grade III splenic laceration, left iliac wing fracture with SI diastasis, bilateral superior/ inferior pubic rami fractures, right sacral fracture, left rib fractures, left distal humerus fracture, left open knee joint, left medial malleolar fracture, right open calcaneous fracture, right medial femoral condyle fracture, right distal radius fracture, multiple abrasions and contusions. She was taken to the operating room on the day of admission for irrigation and debridement of her open calcaneous fracture and left open knee joint. She later underwent open reduction with internal fixation of her iliac wing fracture and SI joint on post injury day four. On post injury day seven, she returned to the operating room for open reduction with internal fixation of her humerus and radius fractures. The remainder of her hospital course involved intensive physical therapy and she was ultimately discharged home with her family on post injury day 19. At the time of discharge she was able to transfer from bed to chair with hoyer-lift assistance. She continues to be followed as an outpatient.