

Author Year Country Research Design Sample Size	Methods	Outcome
Ultrasonography		
Kanno et al. 2009 Japan Prospective Controlled Trial N=43	<p>Population: Mean age=42.6 yr; Gender: males=43; Level of injury: cervical complete=7, cervical incomplete=4, thoracic complete=27, thoracic incomplete=1, lumber complete=3, lumber incomplete=1.</p> <p>Treatment: Pressure injury visual examination and palpation; imaging using high-frequency ultrasonography.</p> <p>Outcome Measures: Examined parts were classified as positive or negative for pressure injury and pattern detected.</p>	<ol style="list-style-type: none"> 1. There were 129 areas examined. 2. Inspection identified the lowest number of lesions and ultrasound examination detected the highest number. 3. In all examinations 112 areas were lesion negative. 4. Ultrasonography alone revealed 9 areas that were abnormal. 5. Palpitation and ultrasonography revealed 6 areas were lesion positive. 6. All three methods detected 2 areas that were abnormal. 7. Ultrasonography always detected a heterogeneous pattern and low echoic areas directly adjacent to the bone.
Magnetic Resonance Imaging		
De Heredia et al. 2012 United Kingdom Case control N=37	<p>Population: N/A</p> <p>Intervention: Magnetic Resonance Imaging.</p> <p>Outcome Measures: Analysis of MRI examinations and clinical records collected over a 4-yr period. Images were independently assessed by 2 experienced radiologists for osteomyelitis based on assigned predictive indicators including cortical bone erosion, soft tissue edema, deep collections, heterotopic new bone, hip effusion, and abnormal signal change of the marrow.</p>	<ol style="list-style-type: none"> 1. The prevalence of osteomyelitis was highly correlated with cortical bone erosion ($r=0.84$) and abnormal bone marrow changes on T1-weighted images ($r=0.82$).
Circulatory Biomarkers		
Loerakker et al. 2012 Netherlands Cohort N=15	<p>Population: <i>SCI patients</i> (n=8): Mean age=56 yr; Gender: males=8; Injury etiology: traumatic=15 SCI. <i>Able-bodied controls</i> (n=7): age- and sex-matched participants without any known comorbidities.</p> <p>Intervention: Blood was drawn for analysis from all participants.</p> <p>Outcome Measures: Circulatory levels of biomarkers for muscle damage were investigated to explore their potential in the early detection of deep pressure injuries. Baseline concentrations of creatine kinase, myoglobin (Mb), heart-type fatty acid binding protein (H-FABP), and C-reactive protein (CRP) were measured in both SCI patients and controls.</p>	<ol style="list-style-type: none"> 1. No significant differences were found in marker concentrations between the two groups, although a trend toward higher CRP levels was observed in the SCI subjects. 2. Because the variations in each of the marker concentrations were smaller than the predicted increases after pressure injuries, this combination of plasma markers may prove appropriate for the early detection of deep pressure injuries.