Immobility

- Evaluation of the clinical effectiveness of bundled care interventions on pressure ulcer incidence in neurosurgical patients
- Perioperative Risk Factors of Postoperative Pressure Injuries in Patients after Surgical Hematoma Evacuation of Intracranial Hemorrhage: A Retrospective Cohort Study
- Timing of Gastrostomy Relative to Tracheostomy After Complete Cervical Spinal Cord Injury: Impact on Hospitalization Outcomes and Complication Rates
- Regional Anesthesia for Pain Management in Idiopathic Multicentric Osteolysis: A Case Report
- Comprehensive DVT risk assessment model for meningioma surgery: development, validation and clinical implementation
- Optimal Tracheostomy Timing After Traumatic Complete Spinal Cord Injury: A Comparative Analysis of Ultraearly, Early, and Delayed Practice
- Anaesthetic management of a patient with tumour-induced osteomalacia for an orthopaedic procedure
- Bilateral Vocal Cord Paralysis Following a Fall: A Rare Case With a Fatal Outcome

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Immobility is the state of not being able to move around. If you fall out of a tree and break your arms and legs, then you will have to put up with months of immobility while your bones heal.

The immobility of patients confined to continuous bed rest continues to raise several very serious challenges for modern medicine. In particular, the overlooking of sudden onset immobility (as in acute stroke) and the delay in addressing the underlying conditions are of utmost importance for the patient and, in the long term, for the medical and social systems. Iliescu et al. describe the design principles and concrete implementation of a new smart textile material that can form the substrate of intensive care bedding, acting as a mobility/immobility sensor. The textile sheet acts as a multi-point pressure-sensitive surface that sends continuous capacitance readings through a connector box to a computer running dedicated software. The design of the capacitance circuit ensures enough individual points to provide an accurate description of the overlying shape and weight. They describe the textile composition and circuit design as well as the preliminary data collected during testing to demonstrate the validity of the complete solution. These results suggest that the smart textile sheet is a very sensitive pressure sensor and can provide continuous discriminatory information to allow for the very sensitive, real-time detection of immobility [1].

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Iliescu BF, Mancasi VN, Ilie ID, Mancasi I, Costachescu B, Rotariu DI. Design Principle and Proofing of a New Smart Textile Material That Acts as a Sensor for Immobility in Severe Bed-Confined Patients. Sensors (Basel). 2023 Feb 25;23(5):2573. doi: 10.3390/s23052573. PMID: 36904777; PMCID: PMC10007060.