



US DEPARTMENT OF DEFENSE

## BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

### **Pain Management and Rehabilitation after Amputation Epidural Lysis of Adhesions (LOA) for Failed Back Surgery and Spinal Stenosis: Factors Associated With Treatment Outcome**

A multicenter retrospective study headed by researchers at CRSR at USUHS investigated factors associated with outcomes following epidural LOA as a treatment for FBSS. The medical records of patients who underwent LOA for FBSS ( $n = 104$ ) or SS ( $n = 11$ ) between 2004 and 2007 were reviewed and 27 demographic, clinical, and procedural variables were extracted and correlated with outcome, which was defined as ~50% pain relief lasting approximately one month. Overall, 48.7% of patients had a positive outcome. As determined by univariable analysis, those who had a positive outcome were significantly older than those with a negative outcome (mean age: 64.1 years vs 57.2 years). Also, baseline Numeric Rating Scale (NRS) pain scores were significantly lower in those with a positive outcome (mean score: 6.7 vs 7.5). Use of hyaluronidase did not correlate with outcomes. As determined by multivariable logistic regression, age ~81 years, baseline NRS score of roughly nine, and patients on or seeking disability or worker's compensation were significantly more likely to experience a positive outcome. Results were published in *Anesthesia and Analgesia*. Selecting patients for epidural LOA based on demographic and clinical factors may help better select treatment candidates. Procedural factors such as the use of hyaluronidase that increase risks and costs did not improve outcomes, so further research is needed before these become standard practice.