

# THE INCIDENCE OF SKIN BREAKDOWN ASSOCIATED WITH USE OF CERVICAL COLLARS.

Powers J, Daniels D, McGuire C, Hilbish C.  
Journal of Trauma Nursing. 2006; 13(4): 198-200

The most common adverse complication associated with cervical immobilization is skin breakdown. The purpose of this prospective, descriptive study was to assess the incidence of tissue breakdown associated with cervical immobilization. In this convenience sample of 484 patients, skin breakdown was noted in 33 (6.8%) patients. All cases of documented skin breakdown were stage I or II, with only 2% (0.4%) patients having stage III breakdown. Days in cervical collar is a significant predictor of skin breakdown, along with presence of edema. Results from this study demonstrate that there is a very low incidence of complications of skin breakdown associated with the use of Aspen cervical collars. The collars are safe and effective to use in patients with actual or suspected head or spine injuries.

## SELECTED QUOTATIONS

### Introduction

"It has been reported that up to 55% of patients in a cervical collar for 5 days or greater develop skin breakdown, specifically occipital, chin, mandibular, ears, and shoulders, as well as macerated skin." (Pg. 198)

"This can significantly affect patient morbidity and length of stay and add significant cost to hospitalization. Previous studies have reported increased hospital costs ranging from \$4,323 to \$30,000." (Pg. 198)

"Powers [1997] reported a decreased incidence of skin breakdown from 19 ulcers to 0 with improved process of care and a change to Aspen cervical collars for cervical immobilization" (Pgs. 198-199)

### Results

Of the 484 patients... "Skin breakdown was noted in 33 (6.8%) patients. Of these, our highest concern is for occiput breakdown, which only occurred in 6 (1.2%) patients." (Pg 199)

### Discussion

"There is a very low incidence of complications of skin breakdown associated with the use of Aspen cervical collars. These collars are safe and effective to use in patients with actual or suspected head or spine injuries." (Pg. 200)