**MEDICAL ADHESIVE RELATED SKIN INJURY (Marsi)**

**A CASE STUDY: FROM EMERGENCY APPENDECTOMY TO Marsi**

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### Purpose

Marsi can occur in healthcare:  
- across all patient populations  
- in all care settings  
- on all areas of the human body  
- following all types of surgeries  
- with wound care  
- with ostomy care

Significance: Marsi threatens patient safety, adds increased cost to patient care, and diminishes quality of life.

### Introduction

**Case Study**  
- White, female patient, age 67  
- Patient well nourished/hydrated  
- Patient is a healthcare provider  
- ER Visit near AM change of shift  
- Change of units - ER to Surgery  
- No Surgeon available until afternoon  
- Patient reported tape allergy  
- Tape allergy noted by CRNA in top corner of assessment form  
- 4 x 2 adhesive bandage covered laparoscopic incision post op

### Post Surgery

- **Day of removal of large bandage**
  - One day after removal of bandage

### Wound Sizes

- **Upper Wound**  
  - L 1.7cm x W 0.5cm x D 0.3 cm  
  - No undermining/tunneling

- **Middle Wound**  
  - L 1.7cm x W 0.7cm x D 0.3cm  
  - No undermining/tunneling

- **Large Lower wound**  
  - L 4.4 cm x W 1.8 cm x D 0.3cm  
  - Moderate non-odoriferous exudate

### Treatment

- **Wound Dressing**  
  - Trendy Tee  
  - 4x4 gauze  
  - 4x4 plastic wrap  
  - 2-3 changes/day  
  - Creams

### Costs

- **A. Physical**  
  - Dressing changes  
  - Time  
  - Supply Purchase

- **B. Emotional**  
  - Tending Wounds

- **C. Economic**  
  - Physician Visits

- **D. Healing time**  
  - 3 months

### Treatment Results

- **After treatment with silver sulfadiazine**  
- **After application of oat beta-glucan**  
- **Two years After injury**

### Procedural/Process Breakdowns

- Related to Marsi Consensus Statements (CS):  
  - #1 Skin not assessed/checked for damage  
  - #2 No management plan for prevention of skin injury  
  - #3 Adhesive bandages applied on patient allergic to tape  
  - #5 Patient over age of 60 years, pre-surgical scrub/cleansing used  
  - #8 Inappropriate selection of bandage for anatomic location  
  - #17 Improper removal of adhesive containing product  
  - #23 No evidence based wound care treatment plan  
  - #25 Case study provides evidence of need for further research

Not addressed in Marsi Statements  
- Communication breakdown between:  
  - ER/OR  
  - Pre-op holding/surgery

### Significance/Take Aways to Prevent Similar Injuries

1. Apply relevant consensus statements when applying wound dressings
2. Add consensus statement to address communication:  
   - Patient handoffs  
   - Time Outs  
   - Shift Reports  
   - Communication to/from medical record
3. Quality improvement and evaluation could use CS to identify procedural/process breakdowns related to Marsi