

INTRODUCTION

- **Medical-Adhesive Skin Injury (MARSI) incidence is rapidly increasing** among patients who receive continuous cardiac monitoring secondary to electrode use and placement.
- Telemetry electrodes need **frequent adhesive contact and removal**.
- Removing telemetry electrodes can lead to **skin stripping, skin tears, and MARSI**.
- Complications include **pain, increased infection risk, and prolonged length of stay**.
- **Clinical practice variations** and **inconsistent preventive measures** contribute to **increasing MARSI incidence**.
- This literature review provides an **evidence-based framework** to reduce MARSI in Telemetry.

METHODS

- Published articles from **2021 to 2025**.
- Peer-reviewed articles reviewed for relevancy
- Databases: **PubMed, CINAHL, OVID**

- **MARSI, Telemetry Electrodes, Cardiac Monitoring, Barrier Film, Skin Preparation**

Inclusion

Search
Terms

RESULTS

Improved Skin Preparation

- Thorough skin cleansing
- Moisture reduction
- Avoid shaving

Consistent Use of Liquid Barrier Film

- Apply to skin prior to electrode placement

Scheduled Electrode Rotation

- Utilize a scheduled electrode rotation
- Regular skin assessment

MARSI Prevention Bundle

- Interdisciplinary team assessment
- Protective barrier film
- Electrode repositioning
- Structured staff education



DISCUSSION

- MARSI related to telemetry electrodes can largely be prevented using **evidence-based preventive strategies**.
- **Standardization of skin preparation, application of barrier film, regular electrode rotation, and utilization of evidence-based prevention bundles** can improve safety practices and lessen the occurrence of MARSI.
- Future research should focus on **translation to practice, sustainability, and further examination of patient-specific risk factors** for directly targeted prevention strategies.

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