

PROTOCOL FOR: Electrocautery: Use of During Cesarean Section

PURPOSE: To outline nursing responsibilities in caring for patients requiring electrocautery during cesarean section.

SUPPORTIVE DATA: Electrocautery is the direct use of high-frequency electrical energy for controlled cutting, coagulation and desiccation of tissue. Mono-polar electrocautery requires a grounding pad, because the current must flow from the generator to the active electrode (pencil) through the patient to the grounding pad to return to the generator. Electrical burns are the greatest hazard of electrocautery. These burns are usually deeper than flame burns, causing widespread tissue necrosis and deep thrombosis.

DESIRED
PATIENT OUTCOME: The patient will not experience electrical burn and/or injury from electrocautery use.

ASSESSMENT: The surgeon will generally request electrocautery on his preference card or request it before the operation.

ASSOCIATED
STANDARDS: Operating Room - Unit Practice Manual,
Protocol for: The Use of Electrocautery

GENERAL
NURSING CARE:

1. Assess for skin integrity of the area of pad placement.
2. Proper grounding pad application should include placement:
 - a. on a long muscle mass as close to the incision as possible, i.e., upper thigh.
 - b. away from the area to be prepped.
 - c. on an area free of hair, scars, or bony prominence.
 - d. of the entire pad in contact with the skin without gaps, folds, or bends.
3. The electrocautery pencil and patient ground wire are connected to the generator according to manufacturer's instructions.
4. "Coag" and "Cut" settings should both be on "5", unless otherwise requested by the surgeons.
5. When the grounding pad is removed following the procedure, assess for skin integrity.

PROTOCOL FOR: Electrocautery: Use of During Cesarean Section

REPORTABLE

- CONDITIONS:
1. Altered skin integrity (redness, broken areas or necroses) especially under the grounding pad.
 2. Any malfunction of the unit.

SAFETY MEASURES:

1. Ensure that the preventative maintenance sticker is up-to-date.
2. All equipment should be in working order pre-operatively. This includes the generator, pencil electrode, and grounding pad. "Coag" and "cut" settings are usually on "5", or per physician request.
3. The generator must be plugged into an electrical outlet. The cord must be inspected by Biomedical Engineering and intact.
4. The grounding pad must be properly applied.
5. Only moist sponges are permitted at the operative site to prevent fire.
6. ECG electrodes should be placed as far from the incision as possible to reduce the risk of burns.
7. Ensure that the patient is not in contact with any metal objects, i.e., stirrups or table attachments.
8. Investigate repeated requests for increasing the current as there may be a leak in the circuit and a shock or burn may result.

DOCUMENTATION:

1. The circulating nurse records the location of the grounding pad, by whom it was applied, the patient skin condition before and after the procedure, and the cutting and coagulation settings used on the Operative Record.
2. If any reportable condition occurs, it should be documented on the Nursing Operative Record under nursing comments.

APPROVAL: Nursing Standards Committee

CREDENTIALS: RN

EFFECTIVE DATE: 1/94

REVISION DATES: 3/97

REVIEWED DATES: 9/08