

Section: Division of Nursing

PROCEDURE

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Issue Date: December 15, 2004
Review Date: April 9, 2010

Approval: _____

HACKETTSTOWN REGIONAL MEDICAL CENTER

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OR
(Scope)

TITLE: TISSEEL

PURPOSE: To outline nursing responsibilities in set up and use of the Tissomat Device

SUPPORTIVE DATA: The Tissomat is used in the operative setting for spraying the two components of Tissomat Fibrin Sealant onto wound surfaces

EQUIPMENT LIST: Components
1. Tissomat device
2. Spray set
3. Nitrogen tank
4. Fibrin Sealant Tissomat 2.0ml (pyxis refrigerator) or 5.0 ml

CONTENT: PROCEDURE STEPS:

1. Place the two syringes filled with the two components of fibrin sealant into the Duploject two-syringe holder (scrub nurse)
2. Carefully and firmly attach the spray head to the ends of the syringes and tighten and lock the pull strap. Fit the connection tube to the lower luer-lock connector of the spray head. Connect the sterile filter at the end of the tube with the Tissomat propellant gas control device. The latter is connected to the propellant gas source (nitrogen tank) via the tube fitted to the back of the unit.

Caution: The pressure of the propellant gas supply must not exceed 7 bars (100 psi).

3. To activate the gas jet, depress foot-switch of the Tissomat device. A pressure of 1.5 – 2 bars (21.5 – 28.5 psi) has proved suitable.
4. The quantities of the two components of fibrin seals to be disposed are controlled by pressing the Duploject plunger.
5. To avoid clogging the spray head tip, the gas jet must be **activated** prior to and after the actual spraying process. The Duploject plunger must only be pressed after having activated the pedal switch of the Tissomat device. In case the spraying process is interrupted or stopped, the gas stream must likewise continue to flow for approximately three seconds.

Functional Tests

1. **Functioning of Pressure Gauge**
To test function of the pressure gauge, connect compressed air to the device and adjust pressure by means of the pressure control after bleeding, the indicated pressure must correspond to the previously adjusted valve. Functional testing is performed at 1 bar and 2 bars (14.25 psi and 28.5 psi)
2. **Functioning of Limit Stop of the Pressure Control**
To test the functioning of the limit stop of the pressure control, connect pressurized air supply to the device and turn pressure control to the limit stop. The indicated pressure must be 2.6 bars ± 0.4 bars (37 psi ± 5.7 psi).
3. **Functioning of Foot Activated Valve**
To test the functioning of the foot activated valve, connect pressurized air supply to the device. Check for passage of pressurized air after activating the valve.

Reference: Tisseel VH Fibrin Sealant Baxter Instruction Sheets