

**EXTERNAL FIXATOR**

- PURPOSE:** To outline the management of patient with external fixators.
- SUPPORTIVE DATA:** External fixation is a versatile method of immobilization that utilizes percutaneous transfixation with pins/wires in bone attached to a rigid external frame allowing a wide range of anatomic correction. It may be used for upper extremity, lower extremity, or pelvic conditions.
- ASSESSMENT:**
1. Assess a minimum of every 8 hours:
    - Neurovascular status of affected extremity
    - Appearance of pin sites
    - Alignment of affected limb
    - Ability to adapt to physical limitation associated with external fixation
    - Stability of external fixator frame
    - Signs/symptoms of infection
    - Pressure points for redness
- INFECTION CONTROL:**
2. Assess for pain a minimum of every 4 hours (every 2 hours ICU)
  3. Perform percutaneous pin care as ordered.
- PATIENT SAFETY:**
4. Keep siderails up and bed in low position when patient is unattended.
  5. Ensure call light is within reach.
  6. Obtain adequate assistance when moving patient. Use appropriate assistive devices (e.g. Hoyer lift, turning sheet).
  7. Cushion pressure points with pillows or off-load
- PATIENT /FAMILY TEACHING:**
8. Teach patient/family:
    - Safety maneuvers to balance self with frame and use of assistive devices
    - How to perform pin care
    - Do not use fixator to reposition patient
    - To inform nurse of increase in pain, numbness, tingling, paresthesia of affected limb.
- REPORTABLE CONDITIONS:**
9. Report the following to the provider:
    - Change in neurovascular status
    - Signs/symptoms of pin site infection (increasing drainage)
    - Malalignment of affected extremity
    - Inability to adapt to physical limitations associated with external fixation
    - Loose pins or frame
- ADDITIONAL STANDARDS:**
10. Refer to the following as indicated:
    - Fall/Injury Prevention
    - High Risk for Peripheral Neurovascular Dysfunction
    - Immobility
    - Pain Management
    - Wound Management
    - Pressure Ulcer Prevention and Management
    - Pin Site (Orthopedic) Care Procedure
- DOCUMENTATION:**
11. Document in accordance with documentation standards.
  12. Document in iView Systems Assessment Navigator Band under “Orthopedic Device/Immobilizer/Cast”, add dynamic group under device: “External fixator”
  13. Document pin care in iView: Customize view for “Pin Wire Care Information” and add dynamic group

Initial date approved: 03/95	Reviewed and approved by: Professional Practice Committee Pharmacy & Therapeutic Committee Nurse Executive Committee Attending Staff Association Executive Committee	Revision Date: 08/95, 10/00, 03/05, 08/14, 03/15, 06/19
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**REFERENCES:**

Holmes, S. B., Brown, S. J. (2005). Skeletal pin site care: National Association of Orthopaedic Nurses guidelines for orthopaedic nursing. *Orthopaedic Nursing*, 24(2), 99-107.

Lagerquist, D., Dabrowski, M., Dock, C., Fox, A., Damond, M., Sandau, K. E., & Halm, M. (2012). Care of externalFixator pinsites. *American Journal of Critical Care*, 21, (4), 288-292.