وزارة الصحة
سياسات واجراءات

اسم السياسة:Chest Physical Therapy POLRSP	رمز السياسة: MOH POL HOS RT 02
عدد الصفحات:8 صفحات	الطبعة: الثانية

الوحدة التنظيمية: مديرية التطوير المؤسسي وضبط الجودة		
الجهة المعنية بتنفيذ السياسة: شعبة المعالجة التنفسية		
الاعداد: -رئيس اختصاص التخدير و العناية الحثيثة -رئيس قسم سلامة المرضى -رئيس مركز التخدير و العناية الحثيثة -رئيس وحدة العناية الحثيثة للكبار -رئيس شعبة التنفسية/إدارة مستشفيات البشير -فني معالجة تنفسية/إدارة مستشفيات البشير	التوقيع: التوقيع: التوقيع: التوقيع: التوقيع: التوقيع:	تاريخ الاعداد: ٣/١٠/ ٢٠٢٥
التدقيق من ناحية ضبط الجودة: مدير مديرية التطوير المؤسسي وضبط الجودة	التوقيع:	تاريخ تدقيق ضبط الجودة: ٣/١١/ ٢٠٢٥
الاعتماد: عطوفة الأمين العام للشؤون الإدارية والفنية	التوقيع:	تاريخ الاعتماد: ٥/١١/ ٢٠٢٥

وزارة الصحة
مديرية التطوير المؤسسي وضبط الجودة
السياسات والإجراءات
Policies & Procedures
٩ • تشرين الثاني ٢٠٢٥
معتمد
Approved

ختم الاعتماد

تتم مراجعة السياسة كل سنتين على الأقل من تاريخ اعتماد آخر طبعة:		
رقم الطبعة	تاريخ الاعتماد	مبررات مراجعة السياسة
الثانية		التحديث

ختم النسخة الاصلية

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وزارة الصحة
سياسات واجراءات

اسم السياسة:Chest Physical Therapy POLRSP	رمز السياسة: MOH | POL | HOS | RT | 02
عدد الصفحات:8 صفحة	الطبعة: الثانية

1- Policy:

1. Chest physiotherapy should be ordered by the physician; frequency of the treatment should be documented.
2. To change or D/C chest physiotherapy (CPT) order, physician should be consulted, order should be documented or signed by the physician.
3. The physician upon writing chest physiotherapy orders should consider respiratory therapy notes and recommendations.
4. Chest physiotherapy should not be ordered for the purpose of suction.
5. Chest physiotherapy should not be ordered for purpose of tracheostomy care.
6. Chest physiotherapy should not be ordered for drowsy, comatose or non-responsive patients.
7. Chest physiotherapy frequency should not exceed "Q 4 hours" for floor patients.
8. Incentive spirometer is recommended for routine, prophylactic use in postoperative patients.
9. CPT is not recommended if the patient is able to mobilize secretions with cough, but
10. Instruction in effective cough technique may be useful.
11. Early mobility and ambulation is recommended to reduce postoperative complications and promote airway clearance.
12. Routine administration of bronchodilators and mucolytic to postoperative patients is not recommended.
13. Lung expansion maneuvers such as coughing, incentive spirometer, and voluntary deep Breaths are best taught prior to surgery.
14. Adequate postoperative pain control may help to minimize postoperative pulmonary
15. Complications by enabling earlier ambulation and improving the patient's ability to take deep breaths.

2- Purpose:

1. To help patients breathe more freely and to get more oxygen into the body.
2. To facilitate removal of retained or profuse airway secretions.
3. To optimize lung compliance and prevent it from collapsing, to decrease the work of Breathing.

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3- Scope:

This policy is applicable to respiratory therapy unit.

4- Responsibilities:

It is the responsibility of respiratory therapist to perform the CPT procedure.

5- Definitions

1. Lung expansion therapy encompasses a variety of respiratory care procedure designed to prevent or correct atelectasis.
2. Airway Clearness Therapy describes methods designed to ensure the patency of the patient's airway, refers to a variety of different strategies used to eliminate excess secretions.
3. Chest physical therapy (CPT) described the primary techniques used to assist with clearing secretions from the airways as Postural Drainage and Percussion.

4. Lung Expansion Therapy
4.1 Incentive spirometry (IS).
4.2 Noninvasive ventilation.
4.3 Intermittent positive airway pressure breathing (IPPB).
4.4 Continuous positive airway pressure (CPAP).
4.5 Breathing exercises (deep breathing, pursed lip breathing and segmental breathing exercise).
4.6 Early patient mobilization and physical activity.
4.7 High-flow nasal cannula (HFNC).
4.8 Positive airway Pressure (PAP) adjuncts (EZPAP).
5. Airway Clearness Therapy
5.1 Cough training and cough stimulation techniques.
5.2 Positive expiratory pressure (PEP) and vibrating PEP (Acapella).
5.3 High-frequency compression/oscillation methods.
5.4 Chest physiotherapy (CPT)
5.4.1 Percussion.
5.4.2 Postural drainage.

5.4.3 Vibration.

6- Procedure:

6.1 Candidates: Any patient with the following conditions:

6.1.1 Accumulation of secretion in the tracheobronchial tree.

6.1.2 In ability to cough effectively.

6.1.3 Impaired mucociliary transport.

6.1.4 Mismatching between ventilation and perfusion.

6.1.5 Atelectasis.

6.1.6 Impaired gas exchange.

6.1.7 Any surgery might affect the normal respiratory mechanism and breathing pattern i.e. thoracic and abdominal operations.

6.1.8 Adventitious breath sounds suggestive of secretions in the airways, which persist after coughing and suctioning.

6.2 Contraindication:

6.2.1 Chest physical therapy should not be performed on patients with:

6.2.1.1 Bleeding from the lungs.

6.2.1.2 Head and neck injury until stabilized.

6.2.1.3 Recent spinal surgery or acute spinal injury.

6.2.1.4 Fractured ribs and damaged chest walls. with or without flail chest

6.2.1.5 Acute asthma.

6.2.1.6 Recent heart attack.

6.2.1.7 Pulmonary embolism.

6.2.1.8 Airway active hemorrhage and hemoptysis.

6.2.1.9 Broncho pleural fistula.

6.2.1.10 Empyema and lung abscess. Tension pneumothorax/untreated pneumothorax.

6.2.1.11 Pulmonary edema associated with congestive heart failure.

6.2.1.12 ICP >15 mm Hg

6.2.1.13 Large pleural effusion.

6.2.1.14 Unstable cardiovascular disorders (uncontrolled hypertension (diastolic> 110), Hemodynamic unstable).

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6.3 Contraindication to External manipulation of the thorax in addition to contraindication Previously listed:

6.3.1 Osteoporosis and osteomyelitis of the ribs.

6.3.2 Coagulopathy.

6.3.3 Platelets <50 and /or INR ≥3.

6.3.4 Subcutaneous emphysema.

6.3.5 Tuberculosis.

6.3.6 Recent surgery, open wounds, or burns on the site of the procedure or healing tissue.

6.3.7 Lung contusion.

6.4 Contraindication for postural drainage in addition to contraindication previously listed:

6.4.1 Esophageal surgery.

6.4.2 Abdominal distension.

6.4.3 Aged, confused, or anxious patients who do not tolerate position changes.

6.5 Contraindication for Positive Airway Pressure in addition to contraindication previously listed:

6.5.1 Patients unable to tolerate the increased work of breathing (acute asthma, COPD).

6.5.2 Recent facial, oral, or skull surgery or trauma.

6.5.3 Acute sinusitis.

6.5.4 Epistaxis.

6.5.5 Esophageal surgery.

6.5.6 Active hemoptysis.

6.5.7 Nausea.

6.5.8 Known or suspected tympanic membrane rupture or other middle ear pathology.

6.5.9 Tracheoesophageal fistula

6.5.10Radiographic evidence of blebs

6.6. Recommendations:

6.6.1 Any patient undergoes major surgery should start incentive Spirometer (refer to policy No. POLRSP-13) and deep breathing exercise at least 24 hours before operation and to be continued after operation according to the patient condition.

6.6.2 Pursed lip breathing exercise should be prescribed for COPD patients rather than Incentive Spirometer.

6.6.3 In abdominal and thoracic surgeries:

6.6.3.1 **High risk patients:** start prophylactic CPT (once) and Incentive Spiro meter 24 hour prior to the operation day. Continue Chest physiotherapy and incentive Spiro meter post operation four times a day for two days then twice daily to be discontinued at the fifth day then continue incentive Spirometer unless patient has pulmonary complications.

6.6.3.2 **Low risk patients:** start prophylactic Incentive Spirometer 24 hour prior to the operation day. Continue Chest physiotherapy post operation three times a day for first day then twice daily for two days to be discontinued at the fourth day unless patient has pulmonary complications. Continue incentive Spiro meter.

6.6.4 for orthopedic and lower limb surgeries:

6.6.4.1 **High-risk patients:** start prophylactic CPT (once daily) and Incentive Spiro meter 24 hour prior to the operation day. Continue Chest physiotherapy and incentive Spirometer post operation twice daily for two days to be discontinued at the third day then continue incentive Spiro meter unless patient has pulmonary complications.

6.6.4.2 **Low risk patients:** start prophylactic Incentive Spiro meter 24 hour prior to the operation day. Continue incentive Spiro meter post operation only unless patient has pulmonary complications.

6.6.5 Patient undergoes minimal abdominal surgery e.g. laparoscopic upper gastro intestinal Surgery should start incentive Spiro meter pre and post operation only unless pulmonary complications presented.

6.6.6 If clinically significant pulmonary complications presented, patient must be reevaluated In addition, frequency of chest physiotherapy should be adjusted according to the patient needs.

7. Forms and Document:

None.

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